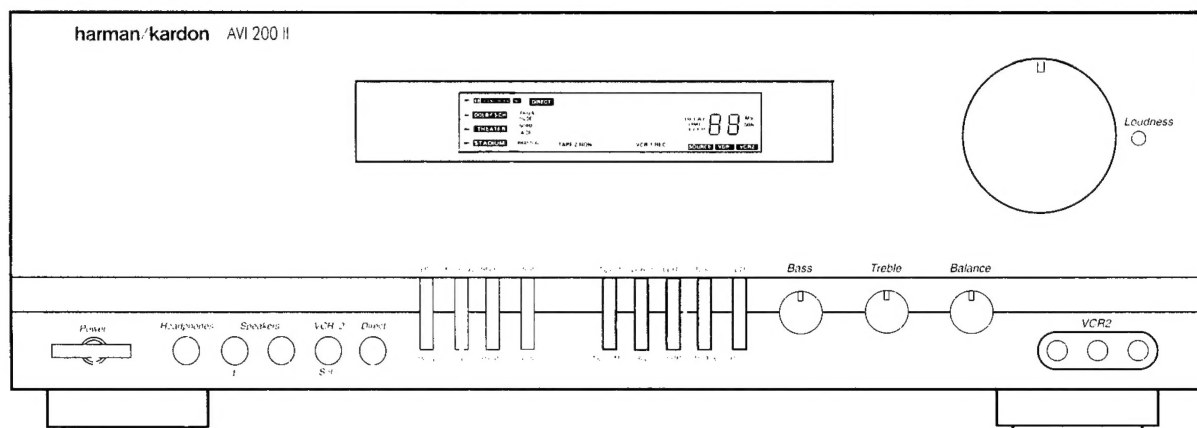


The Harman Kardon Model AVI200MKII AUDIO AND VIDEO AMPLIFIER

Technical Manual



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harman/kardon

Parts and Service Office
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1112-AVR200MKII G9604 1200 Printed in Korea

SPECIFICATIONS

FRONT AMP SECTION

	Nominal	Limit
RMS Output Power		
THD (0.2%, 8 ohms, 1 kHz)	$\geq 68 \text{ W}$	$\geq 65 \text{ W}$
Both Channel Driven (20 Hz - 20 kHz)		
THD (20 Hz - 20 kHz) at 65 W, 8 ohms		
20 kHz	$\leq 0.09\%$	$\leq 0.2\%$
1 kHz	$\leq 0.09\%$	$\leq 0.2\%$
20 kHz	$\leq 0.09\%$	$\leq 0.2\%$
IM Distortion at 65 W, 8 ohms		
60:7000 Hz = 4:1	$\leq 0.1\%$	$\leq 0.2\%$
Input Sensitivity at 65 W, 8 ohms		
PHONO (MM)	$2.5 \pm 0.2 \text{ mV}$	$2.5 \pm 0.3 \text{ mV}$
CD, AUX, VCR	$150 \pm 20 \text{ mV}$	$150 \pm 30 \text{ mV}$
S/N Ratio Input Shorted at Volume Max.		
(WTD IHF-A) at 65 W, 8 ohms		
PHONO	$\geq 72 \text{ dB}$	$\geq 65 \text{ dB}$
CD, AUX	$\geq 91 \text{ dB}$	$\geq 85 \text{ dB}$
TV, VCR1,2	$\geq 91 \text{ dB}$	$\geq 85 \text{ dB}$
Phono Overload at 1 kHz, THD: 0.5%		
Phono Input→Tape Monitor Output	$\geq 140 \text{ mV}$	$\geq 120 \text{ mV}$
Phono Equalization (RIAA 30 Hz - 15 kHz)		
Tape Monitor Output	$\text{RIAA} \pm 1.0 \text{ dB}$	$\text{RIAA} \pm 2.0 \text{ dB}$
Tone Control		
Bass: 100 Hz	$+10 \pm 1.0 \text{ dB}$	$+10 \pm 2.0 \text{ dB}$
	$-10 \pm 2.0 \text{ dB}$	$-10 \pm 3.0 \text{ dB}$
Treble: 10 kHz	$+10 \pm 1.0 \text{ dB}$	$+10 \pm 2.0 \text{ dB}$
	$-10 \pm 2.0 \text{ dB}$	$-10 \pm 3.0 \text{ dB}$
Loudness Contour at -40 dB		
100 Hz	$+6 \pm 2.0 \text{ dB}$	$+6 \pm 3.0 \text{ dB}$
10 kHz	$+3 \pm 2.0 \text{ dB}$	$+3 \pm 3.0 \text{ dB}$
Frequency Response at 1 W, 8 ohms		
CD/AUX		
20 Hz, 20 kHz	$\pm 1.0 \text{ dB}$	$\pm 2.0 \text{ dB}$
Channel Crosstalk Input Shorted at 65 W, 8 ohms		
1 kHz	$\geq 55 \text{ dB}$	$\geq 48 \text{ dB}$
10 kHz	$\geq 45 \text{ dB}$	$\geq 37 \text{ dB}$

CENTER AMP SECTION

	Nominal	Limit
RMS Output Power		
THD (0.2%, 8 ohms, 1 kHz)		
Only Center Channel Driven	$\geq 68 \text{ W}$	$\geq 63 \text{ W}$
S/N Ratio		
Input Shorted, IHF-A WTD	$\geq 75 \text{ dB}$	$\geq 68 \text{ dB}$
Frequency Response at -3 dB		
Normal	130 Hz - 20 kHz	180 Hz - 15 kHz
Wide	40 Hz - 20 kHz	60 Hz - 15 kHz

REAR AMP SECTION

	Nominal	Limit
RMS Output Power		
THD (1%, 8 ohms, 80 Hz - 7 kHz)		
Both Rear Channel Driven	$\geq 27 \text{ W}$	$\geq 23 \text{ W}$
S/N Ratio (Input Shorted, IHF-A WTD)		
Dolby	$\geq 65 \text{ dB}$	$\geq 57 \text{ dB}$
Stadium	$\geq 65 \text{ dB}$	$\geq 57 \text{ dB}$
Theater	$\geq 65 \text{ dB}$	$\geq 57 \text{ dB}$
Frequency Response at -3 dB		
8 ohms, Dolby Pro-Logic	100 Hz - 6 kHz	120 Hz - 5 kHz

VIDEO AMP SECTION

	Nominal	Limit
Input Sensitivity/Impedance		
VCR1, VCR2, VDP	$1 \text{ V}_{p.p}/75 \Omega$	$\pm 0.5 \text{ dB}$
Output Level/Impedance		
VCR1, REC out, TV Monitor out	$1 \text{ V}_{p.p}/75 \Omega \pm 0.3 \text{ dB}$	$\pm 1.0 \text{ dB}$
Frequency Response at -3 dB	DC-10 MHz	5 - 6 MHz
Crosstalk at 1.0 MHz	$\geq 50 \text{ dB}$	$\geq 43 \text{ dB}$

GENERAL

Power Consumption;	
USA/Canada	2.5 A
Europe	650 W
Power Supplies;	
USA/Canada	AC 120 V, 60 Hz
Europe	AC 230 V, 50 Hz
Dimensions (W×H×D);	
inches	$17^{3/8} \times 6^{1/8} \times 16^{1/2}$
mm	$440 \times 155 \times 420$
Weight (lbs/kgs)	26.9/12.2

These specifications are service target specs.

Specifications and components are subject to change without notice.

Overall performance will be maintained or improved.

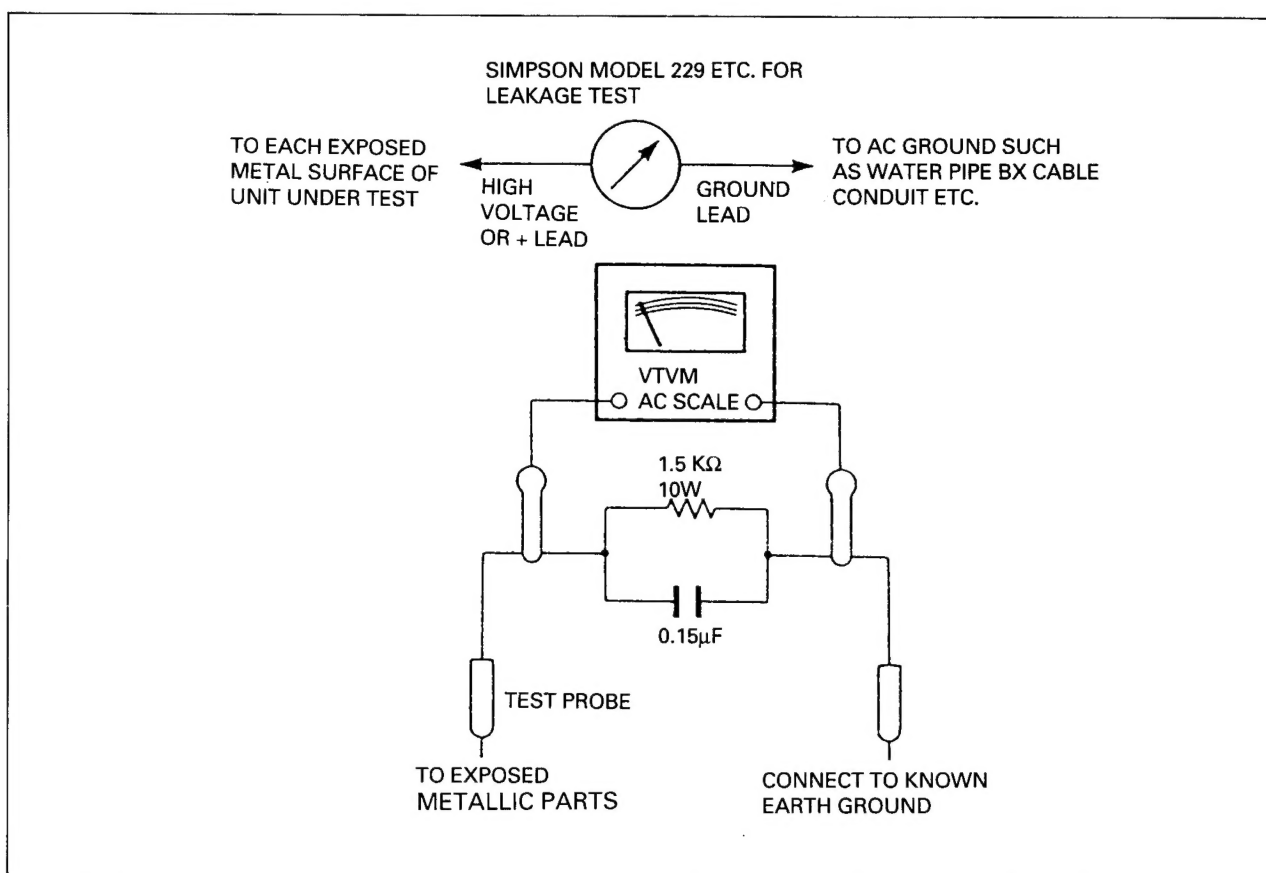
LEAKAGE TEST

Before returning the unit to the user, perform the following safety checks:

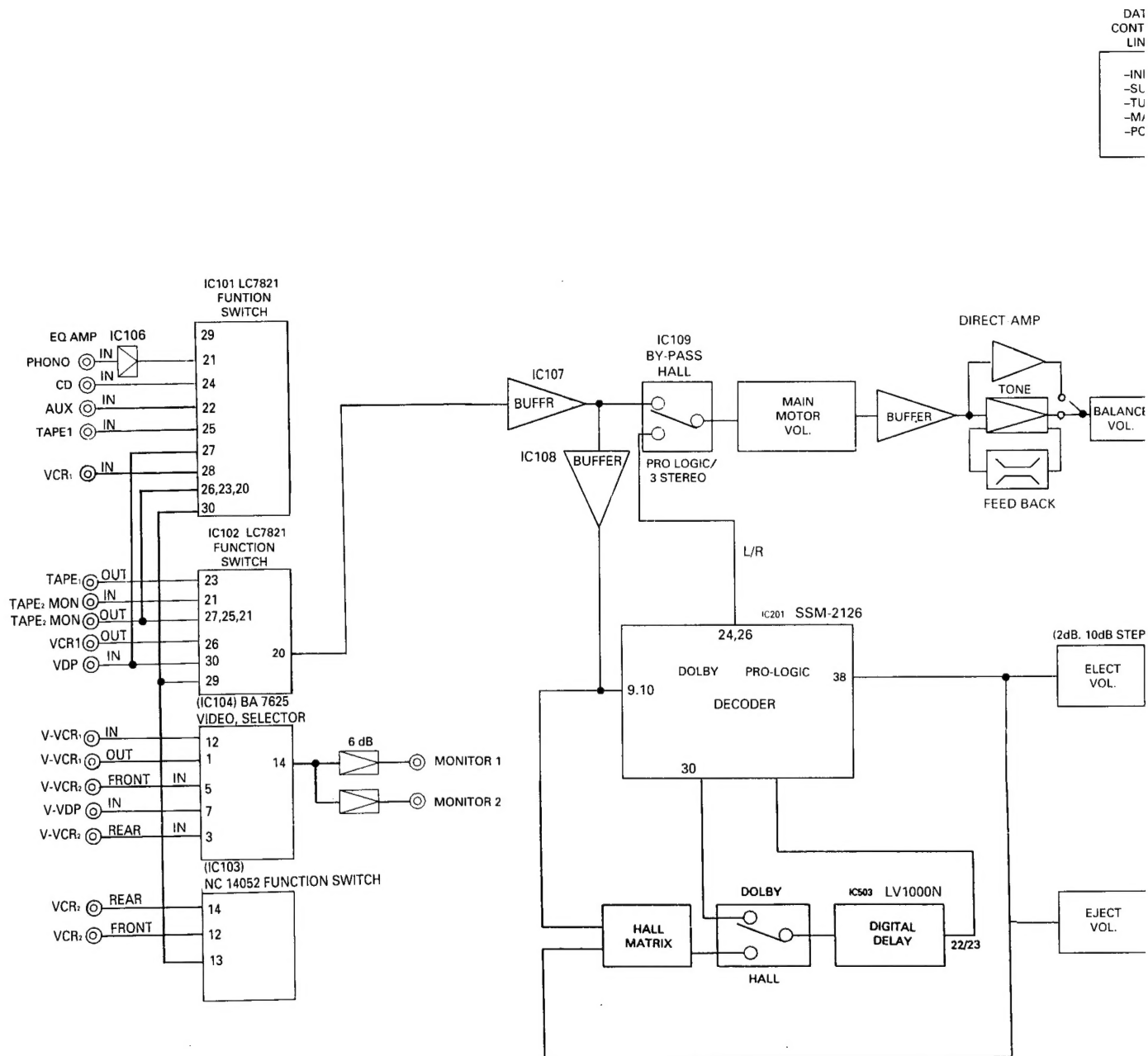
1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metallic parts in the unit.
2. Be sure that any protective devices such as nonmetallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc. Which were removed for servicing are properly reinstalled.
3. Be sure that no shock hazard exists; check for leakage current using Simpson Model 229 Leakage Tester, standard equipment item No. 21641, RCA Model WT540A or use alternate method as follows: Plug the power cord directly into a 230-volt AC receptacle (do not use an Isolation Transformer for this test).

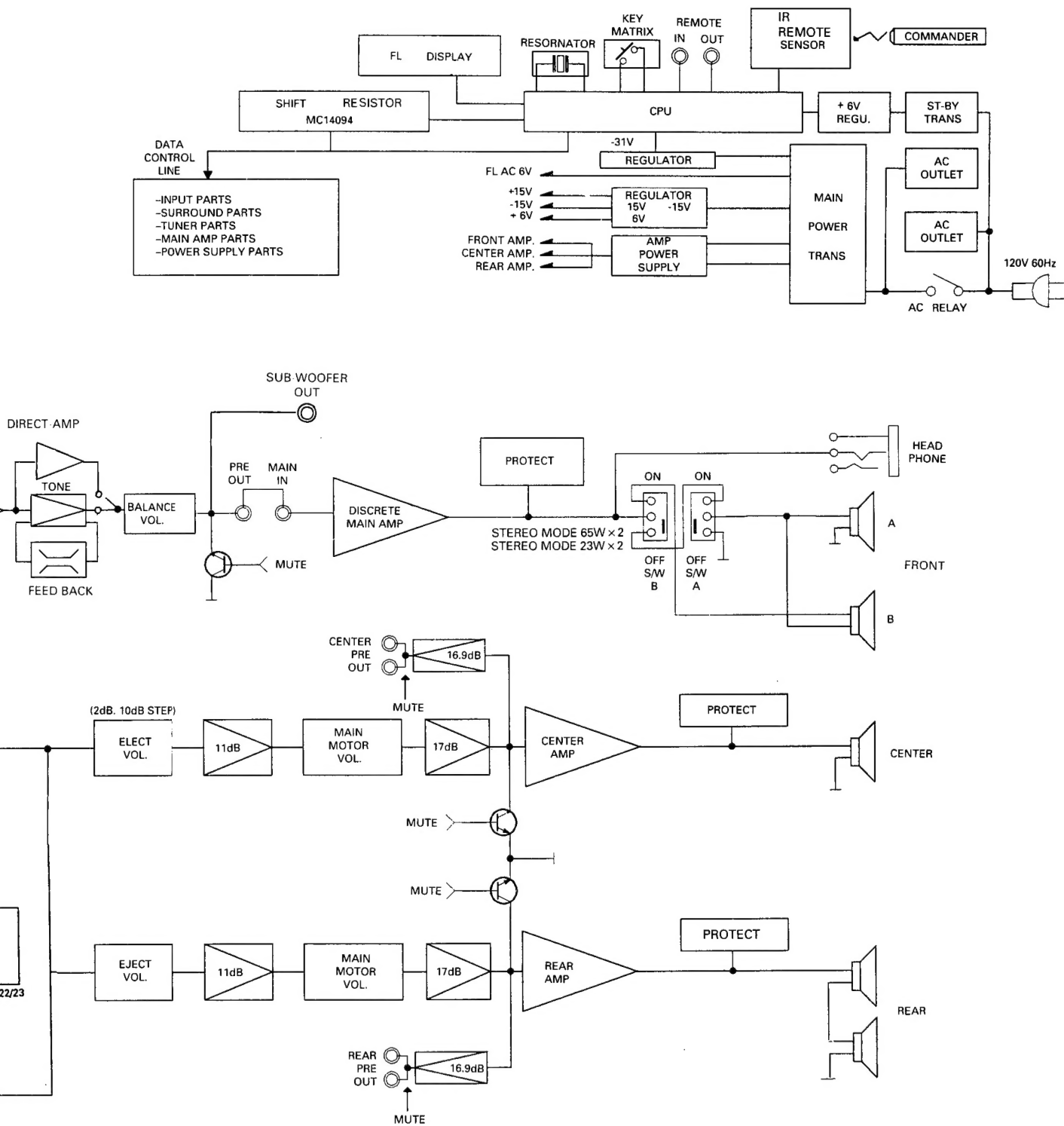
Using two clip leads, connects a 1500 Ohm, 10-watt resistor paralleled by a 0.15 μ F capacitor, in series with all exposed metal cabinet parts and a known earth ground, such as a water pipe or conduit. Use a VTVM or VOM with 1000 Ohms per volt, or higher sensitivity to measure the AC voltage drop across the resistor. (See Diagram.) Move the resistor connection to each exposed metal part having a return path to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor. (This test should be performed with the power switch in both the On and Off positions.)

A reading of 0.35 volt RMS or more is excessive and indicates a potential shock hazard which must be corrected before returning the unit to the owner.



BLOCK DIAGRAM

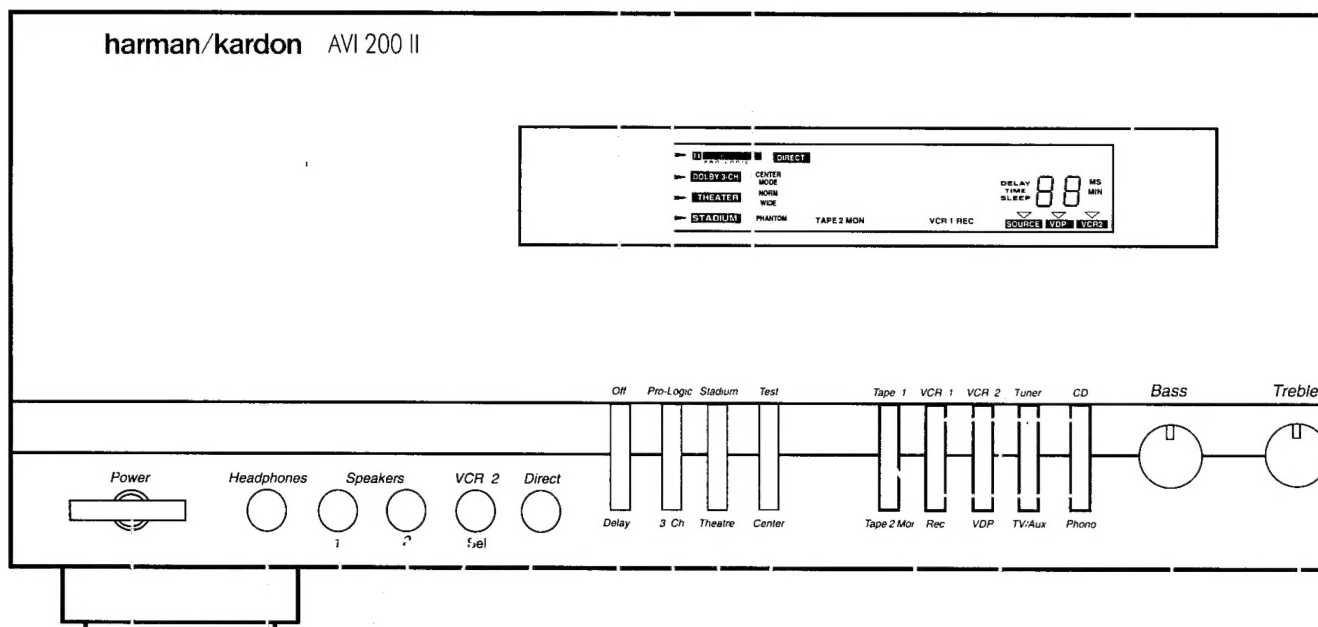




CONTROLS AND FUNCTIONS

7 9 13

22



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1. POWER BUTTON

Press this button to turn the power on. Press again to turn the power off. It can also be used as a system power button, if you connect the other components to the switched outlets.

NOTE: In POWER OFF state, the POWER indicator will light up orange and power is partially supplied to the infrared remote control receiver and the memory circuitry.

2. 1/2 SPEAKER SWITCHES

These switches allow you to select various combinations of speakers as follows;

- To drive 1 pair of speakers, push only the speaker 1 switch in.
- To drive a second pair of speakers, push only the speaker 2 switch in.
- To drive both pairs of speakers, push both 1 and 2 switches in.

- To use headphones for private listening or monitoring, leave both 1 and 2 switches pushed out.

NOTE: If both speaker switches are pushed in and only one set of speakers is connected to the amplifier, no sound will be heard.

3. HEADPHONE JACK

Stereo headphones can be plugged into this jack for private listening. Headphone impedance should be between 8 and 2K ohms. Best results between 200 and 400 ohms.

4. BASS CONTROL

Modifies the low-frequency sound of the left and right channels as much as +/- 10dB. Set this control at a suitable position for your taste and room acoustics.

5. TREBLE CONTROL

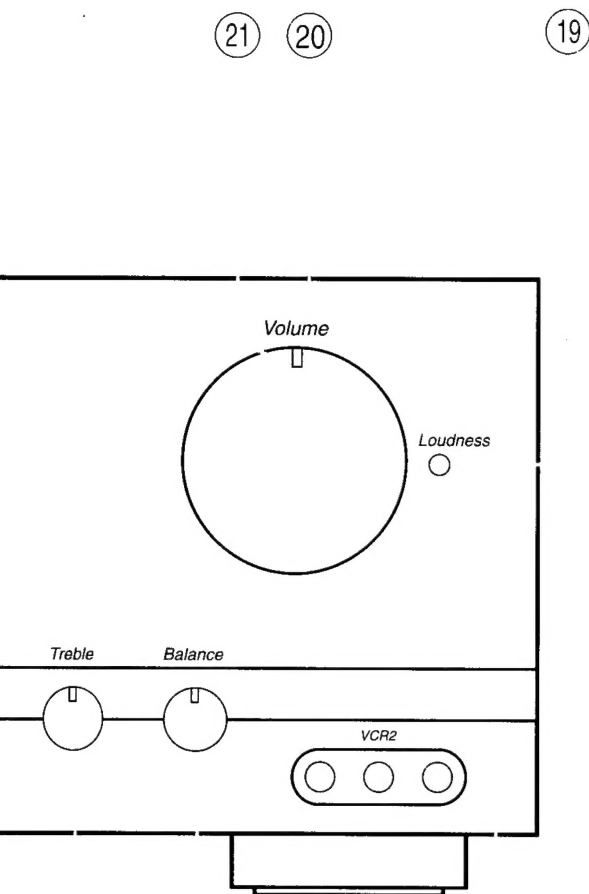
Modifies the high-frequency sound the left and right channels as much +/- 10dB. Set this control at a suitable position for your taste and room acoustics.

6. BALANCE CONTROL

This control is used for balancing the relative sound volume of the left and right channel speakers. Clockwise rotation reduces the volume from the left speaker, counterclockwise rotation reduces the volume from the right speaker.

7. SURROUND-OFF MODE SELECTOR

Press this switch to select normal stereo mode.



CONTROL
Frequency sound of
as much as
at a suitable
and room

CONTROL
balancing the
of the left and
Clockwise
ume from the
clockwise rotation
n the right

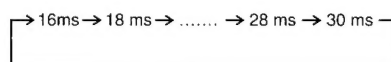
F MODE

ect normal

8. DELAY TIME

Adjusts time delay between front and rear channels, operates only when the surround mode is on. (see Delay Time button on page 16).

Adjusts the surround delay time in steps. For Dolby Surround 20ms is standard



9. PRO LOGIC MODE

Press this button for Pro-Logic mode.

10. 3 CHANNEL MODE

The 3 channel mode can be used when rear speakers are not being used to provide a center (dialog) channel.

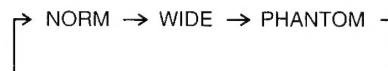
11. STADIUM/THEATER MODE

Switches for selecting desired surround mode; Stadium or Theater. See Surround Sound Effects on page 13.

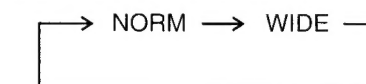
12. CENTER MODE SELECTOR

This button operates only in Dolby Pro Logic and Dolby 3 Stereo mode. The mode changes as below, when the button is pressed in succession.

DOLBY PRO LOGIC MODE



DOLBY 3 STEREO MODE



The display window shows each mode.

NORM: Select this mode if you use a small center speaker. The bass sound of the center channel is reproduced from the front speakers, because the small speaker cannot produce enough bass.

WIDE: Select this mode if you use a medium-to-large center speaker. The bass sound is reproduced from the center speaker.

PHANTOM: Select this mode if you don't use a center speaker. The center speaker's sound is reproduced from the front speakers.

13. TEST TONE BUTTON

This button operates only in Dolby Pro Logic and Dolby 3 Stereo mode. When the button is pressed, 2 seconds of test tone is generated in all channels (Left, Center, Right, and Rear) in succession. The display window shows TEST Left, Center, Right, and Rear in succession (in Dolby Pro Logic mode) or Left Center or Right (in Dolby 3 stereo mode) in succession. Use this button to test speaker connections.

14. SOURCE/DIRECT BUTTON

This feature bypasses the tone control circuitry, resulting in flatter frequency response and wider bandwidth. When it is activated, "DIRECT" illuminates in the display.

15. TAPE 2 MONITOR BUTTON

Set TAPE 2 MON to the "off" position when you want to hear the other input functions. Press this button to monitor the cassette deck connected to the TAPE 2 MON input jacks.

16. INPUT FUNCTION SELECTOR

Press the button to select the desired input function: VCR 1, VCR 2, VDP, TAPE 1, TV/Aux, Tuner, CD or Phono.

To dub from VCR 2 to VCR 1, press the VCR 2 button and then press the VCR 1 REC button.

For the input function of VCR 1 press the VCR 2 button and VCR1 DUBBING button. Set the recording VCR (VCR 1) to recording mode. Set the playback VCR (VCR 2) to playback mode.

Dubbing will start.

■ To hear another input source during video tape dubbing: Press the input function you want to hear, and play the input source.

17. VCR 2 SELECTOR

Push in this button to select the VCR 2 jacks on the front, rather than the VCR 2 jacks on the rear.

18. VCR 2/CAMCORDER INPUT JACKS

VIDEO IN:

Connect to the VIDEO OUTPUT jack of a VCR.

AUDIO IN:

Connect to the AUDIO OUTPUT jacks of a VCR.

19. LOUDNESS BUTTON

Press this button to compensate for the response of the human ear at low listening levels (known as the Fletcher-Munson hearing curve). The high and low frequencies are automatically boosted when this button is pushed in. In the OFF position, the frequency response is flat at all volume levels. This button does not work at high volume levels.

20. VOLUME CONTROL

Turn the VOLUME clockwise to increase the volume and counterclockwise to decrease it. The volume of the front, center, and rear channels is changed at the same time.

21. VOLUME LEVEL INDICATOR

This indicator moves in accordance with the volume level. The indicator blinks when the mute button on the remote commander is pressed.

22. DISPLAY WINDOW

This window shows the state of operation for easier control of the amplifier. It also contains the IR Remote Sensor.



2. Pin Functions

Pin No.	Symbol	Description
1 / 2	N.C	Not used!
3	P / D	Input to detect power down. (At "L", it is active.)
4	RMC IN	Input for remote control signal. (At "L", it is active.)
5	PROTECT	Signal input for protection. (At "L", it is active.)
6 / 7	CK / DA	Clock / Data output for LC7821, GD4094, TC9213 and LM7001.
8 / 9	N.C	Not used !
10	VOL. DOWN	Output to drive volume motor for decreasing volume level. (At "H", it is active.)
11	VOL. UP	Output to drive volume motor for increasing volume level. (At "H", it is active.)
12	VOL. LED	Output to drive volume LED.
13~15	N.C	Not used !
16 - 23	KEY IN	Data input for key scan.
24	DIRECT	Output to allow sound signal to by-pass tone control circuitry. (At "H", it is active.)
25	N.C	Not used !
26	ST-TC9176	Chip enable output for TC9176.
27	ST-MC14094	Chip enable output for MC14094.
28	ST-LC7822	Chip enable output for LC7822.
29	C. MUTE	Output for center mute. Output, "H" under the following conditions. 1. When power is turned on or off. 2. When center mode is turned on or off. 3. When center mode is selected. 4. When test tone mode is on or off or when the channel is changed in the test tone mode. 5. When the protection terminal's level is "L". 6. When "-∞" mute signal is received from the commander.
30	S. MUTE	Output for surround mute. Output, "H" under the following conditions. 1. When power is turned on or off. 2. When surround mode is selected. 3. When test tone mode is on or off or when channel is changed in the test tone mode. 4. When adjusting delay time. 5. When the protection terminal's level is "L". 6. When "-∞" mute signal is received from the commander.
31~33	N.C	Not used !

Pin No.	Symbol	Description
34	MODEL	Input to select. (At "L" is selected).
35 - 37	N.C	Not used ! (Connected to V_{DD})
38	RST	Input to reset CPU.
39	EXTAL	Input for crystal oscillator.
40	XTAL	Output for crystal oscillator.
41	V_{SS}	Ground.
42	N.C	Not used !
43 - 45	N.C.	Not used ! (Connected to V_{DD})
46	AV_{ref}	Reference voltage. (Connected to 5 V, not V_{DD} .)
47	AV_{SS}	Ground.
48	ST.BY	When power is on, control data output is "H". When power is off, control data output is "L" and last memory function is activated.
49 - 55	N.C	Not used !
56 - 63	SEGMENT	Segment signal output for FIP.
64 - 71	SEGMENT / KEY SCAN	Segment signal output for FIP and Data output for key scan.
72 - 77	N.C.	Not used !
78 - 87	GRID	Grid signal output for FIP.
88	V_{FDP}	Power supply for FIP controller.
89	V_{DD}	+5 V power supply.
90	N.C	Not used !
91	V_{SS}	Ground.
92	M. MUTE	Output for main mute. Output is "H" under the following conditions. 1. When power is turned on or off. 2. When function is changed. 3. When the protection terminal's level is "L". 4. When "-∞" mute signal is received from the commander.
93		Not used!
94	H. MUTE	Output for headphone mute. Output, "H" under the following conditions. 1. When power is turned on or off. 2. When selecting the input function. 3. When the protection terminal's level is "L". 4. When "-∞" mute signal is received from the commander.
95	ST-LC7821	Chip enable output for LC7821.
96	ST-MC4094	Chip enable output for MC4094.
97~99	N.C	Not used !
100	VCR 2 SEL.	Input to select VCR 2 rear or front. At "H", VCR 2 rear is selected and at "L", VCR 2 front is selected.

DISASSEMBLY PROCEDURES

REFER TO PAGES 23 AND 37.

1 COVER TOP REMOVAL

Remove 8 screws (A) and then remove the Cover Top (61).

2 COVER BOTTOM REMOVAL

Remove 9 screws (B) and then remove the Cover Bottom (35).

3 FRONT PANEL ASSEMBLY REMOVAL

1. Remove the Cover Top (61), referring to the previous step 1.
2. Remove the Card cable from wafer (CP502) on the Volume P.C.Board (PCB6).
3. Remove the Card cable from wafer (CP802) on the Dolby P.C.Board (PCB8).
4. Remove the Card cable from wafer (CP803) on the Tuner P.C.Board (PCB2).
5. Disconnect (CP401 and CP581) from the Dolby P.C.Board (PCB8).
6. Disconnect (CP291) from the Tuner P.C.Board (PCB2).
7. Disconnect (CP402) from the Main P.C.Board (PCB1).
8. Disconnect (CP801) from the Power Supply P.C.Board (PCB3).
9. Remove 4 screws (C), 4 screws (A) and then remove the Front Panel Assembly (AA).

4 HEADPHONE P.C.BOARD (PCB9) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the Previous step 3.
2. Remove 2 screws (E) and then remove the Headphone P.C.Board (PCB9).

5 VOLUME P.C.BOARD (PCB6) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the Previous step 3.
2. Pull out the Volume Knob (5) with LED P.C.Board (PCB10).
3. Remove the Hex Nut from the volume-motor to remove the Volume P.C.Board (PCB6).
4. Remove 2 screws (F) and then remove the Volume P.C.Board (PCB6).

6 TONE P.C.BOARD (PCB5) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the Previous step 3.
2. Pull the Bass, Treble, Balance Knobs (7).
3. Remove the Hex Nuts from the variable resistors (19, 20).
4. Remove 4 screws (G) and then Tone P.C.Board (PCB5).

7 FRONT P.C.BOARD (PCB7) REMOVAL

1. Remove the Front Panel Assembly (AA), referring to the Previous step 3.
2. Remove 11 screws (H) and then remove the Front P.C.Board (PCB7).

8 SUB-WOOFER P.C.BOARD (PCB11) REMOVAL

1. Remove the Cover Top (61), referring to the previous step 1.
2. Disconnect (CP903) on the Tuner P.C.Board (PCB2).
3. Remove 2 screws (K) and then remove the Sub-Woofer P.C.Board (PCB11).

9 TUNER P.C.BOARD (PCB2) REMOVAL

1. Remove the Cover Top (61), referring to the previous step 1.
2. Remove the Card cable from wafer (CP803) on the Tuner P.C.Board (PCB2).
3. Disconnect (CP102, CP103, CP104, CP105, CP291, CP501, CP704, CP901, CP902 and CP903) on the Tuner P.C.Board (PCB2).
4. Remove 2 screws (I), 6 screws (J) and then remove the Tuner P.C.Board (PCB2).

10 DOLBY P.C.BOARD (PCB8) REMOVAL

1. Remove the Cover Top (61), referring to the previous step 1.
2. Remove the Front Panel Assembly (AA), referring to the previous step 3.
3. Remove the Card cable (CN501) on the Dolby P.C.Board (PCB8).
4. Disconnect (CP601) from the Dolby P.C.Board (PCB8).
5. Unjoin 2 Fasteners (37) for remove the Dolby P.C.Board (PCB8).

11 SURROUND P.C.BOARD (PCB4) REMOVAL

1. Remove the Cover Top (61), referring to the previous step 1.
2. Do Steps 2, 3 and 10.
3. Disconnect (CP602) from the Power Supply P.C.Board (PCB3).
4. Remove 6 Screws (L) and then remove the Chassis Front (36).
5. Remove 2 screws (M) and then remove the Surround P.C.Board (PCB4).

12 CHASSIS BACK REMOVAL

1. Remove the Cover Top (61), referring to the previous step 1.
2. Do Steps 2, 3, 10, 11.

3. Unsolder 2 leads of the AC Cord (59) from neutral and live on the Power Supply P.C.Board (PCB3).
4. Remove 20 screws (N) and then remove the Chassis Back (57).

13 MAIN P.C.BOARD (PCB1) REMOVAL

1. Remove the Cover Top (61), referring to the previous step 11.
2. Do Steps 2, 3 and 12.
3. Unsolder all leads of Q262L/R/C, Q263L/R/C, Q270L/R/C and IC241 from copper track on the Main P.C.Board (PCB1).
4. Disconnect (CP241) from the Power Transformer (62).
5. Remove 2 screws (O) and then remove the Main P.C.Board (PCB1).

14 POWER SUPPLY P.C.BOARD (PCB3) REMOVAL

1. Remove the Cover Top (61), referring to the previous step 11.
2. Disconnect (CP801, CP703, CP602, CP101, CP701 and CP702) from Power Supply P.C.Board (PCB3).
3. Disconnect (CP704) from the Tuner P.C.Board (PCB2).
4. Unsolder 2 leads of the AC Cord (59) from neutral and live on the Power Supply P.C.Board (PCB3).
5. Remove 4 screws (P) and then remove the Power Supply (PCB3).

TROUBLESHOOTING

Symptom	Cause and Remedy
Amplifier inoperative (FL indicator does not light)	A) Faulty AC power cord. Replace. B) Defect the power switch. Replace. C) Broken wire in the power transformer. Replace the power transformer. D) Blown power Replace the fuse.
Fuse blows when power is turned on.	A) Defective power transformer. Replace. B) Short the primary or secondary of the transformer circuitry. Repair the trace. C) Damaged rectifier (D241 to D244) or damaged trans (Q262 and Q263). Replace the defective component(s). D) Short circuit in the amplifier circuit. Repair the short.
Power indicator lights but no sound from both channels	A) Speaker switch 1 or 2 defective. Replace the defective switch(es). B) Defect in transistor Q262L/R, Q263L/R on the Main Amp Board. Repair the shorted component(s) in the amplifier circuit.
Speaker A inoperative	A) Speaker switch A defective. Replace
Speaker B inoperative	A) Speaker switch B defective. Replace.
Speaker works normally but headphones inoperative	A) Headphone plug does not mate with jack. Replace the jack. B) Defective resistors R295L/R Replace.

Symptom	Cause and Remedy
PHONO input inoperative	<p>A) Poor contact in phono input jack. Repair or replace the jack.</p> <p>B) Defective phono switch or IC106. Replace.</p>
LOUDNESS has no effect	<p>A) Defective loudness switch. Replace.</p> <p>B) Defective resistor R301L/R, C301L/R and C302L/R Replace the defective component(s).</p>
Bass control has no effect	<p>A) Variable resistor BASS defective. Replace.</p> <p>B) Defective R416L/R, R417L/R, R418L/R, C414L/R, C415L/R Replace the defective component(s).</p>
Treble control has no effect	<p>A) Variable resistor TREBLE defective. Replace.</p> <p>B) Defective C417L/R, C418L/R, R419L/R, R420L/R Replace the defective components(s).</p>
Noise Volume control	<p>A) Defective IC301. Replace.</p> <p>B) Defective capacitor C304 or C305 Replace the defective capacitor(s).</p>
Remote Control Unit inoperative	<p>A) Weak Battery. Replace.</p> <p>B) Defective. Replace.</p> <p>C) Defective IC801 or Sensor 801 (CPU Board) or IC01. Replace.</p>

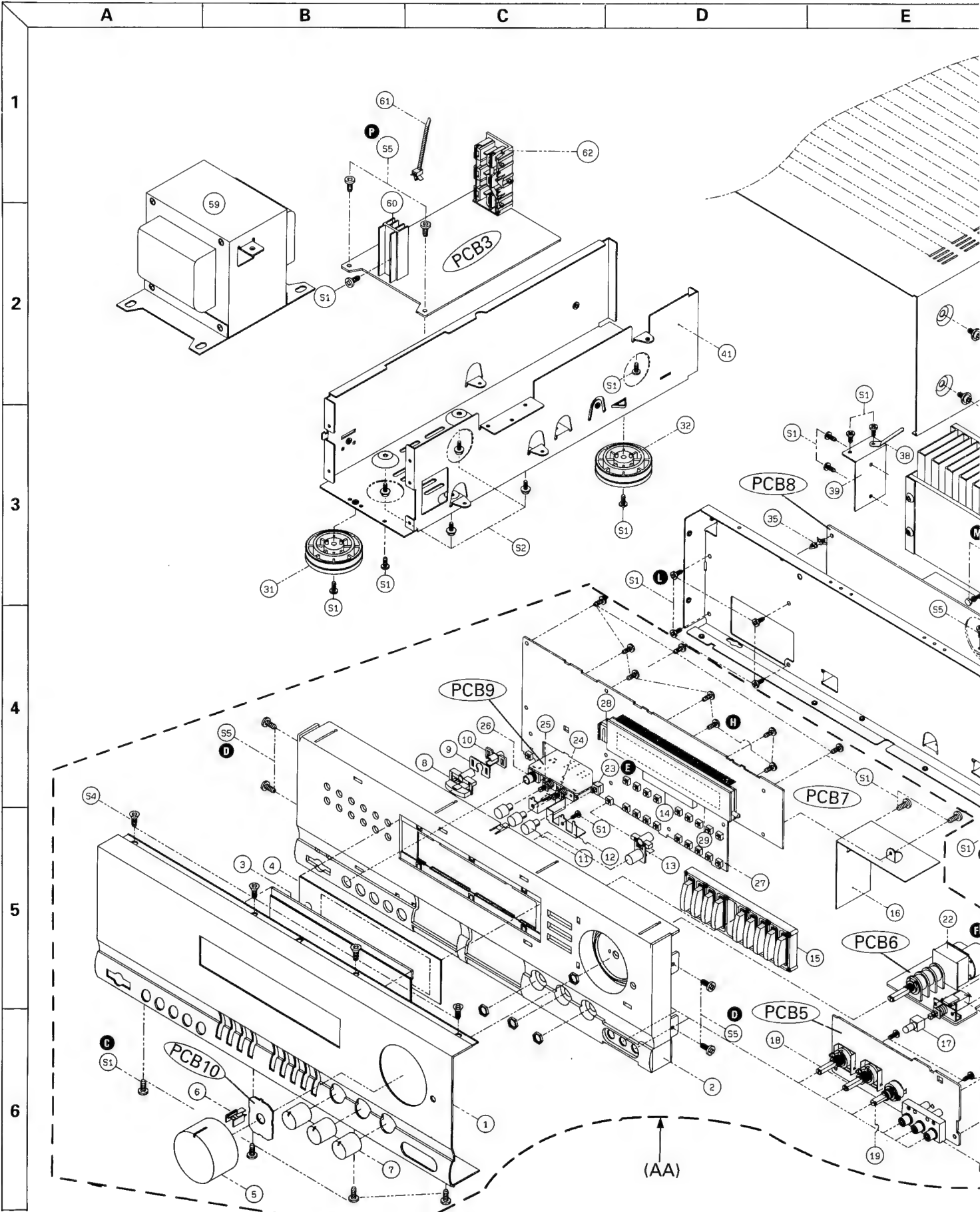
GENERAL UNIT PARTS LIST

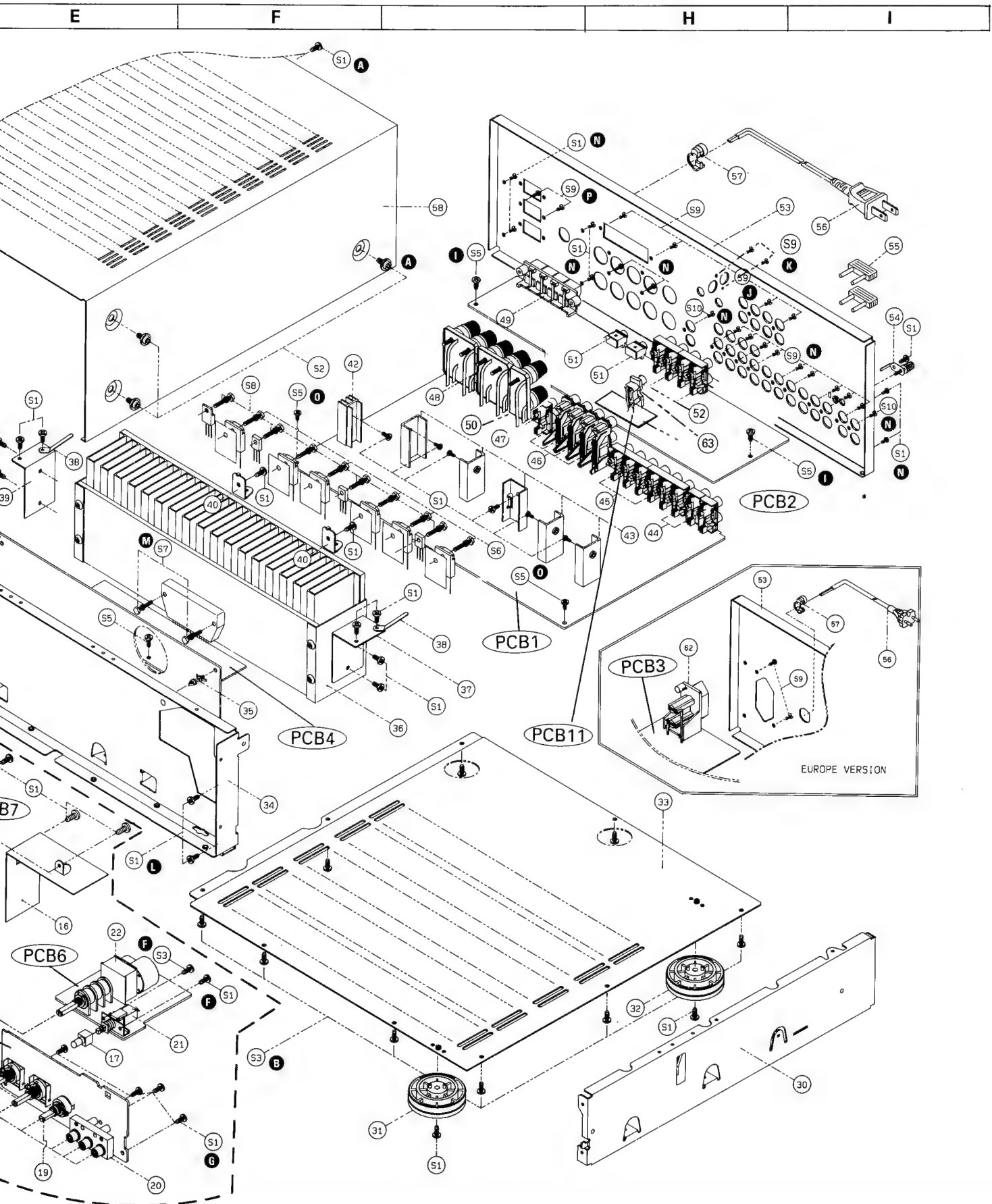
Ref. No.	Description	Mfr. Part No.	Q'ty	Version
CABINET AND CHASSIS				
1	Panel, Front	048602019322	1	
2	Body, Front	8521008910	1	
3	Window, FL	048553020111	1	
4	Filter, FL	048535042611	1	
5	Knob, Volume	048643006711	1	
6	Indicator, Volume	8555049210	1	
7	Knob, Rotary	048545126311	3	
8	Button, Power	048543061011	1	
9	Light Shield	8535042910	1	
10	Indicator, Power	8555048710	1	
11	Button, Speaker	048545124111	3	
12	Bracket, Shield	6165148210	1	
13	Button, Source	048543060911	1	
14	Sponge	6715020730	1	
15	Button, Seesaw	048543060811	1	
16	Shield Fence	6163114510	1	
17	Button, Tuning	048543059711	1	
18	Volume Rotary (Bass/Treble)	3208049510	2	
19	Volume Rotary (Balance)	3208052010	1	
20	Jack, RCA, 3P	4438109710	1	
21(SW301)	Switch, Push	4628059610	1	
22(VR301)	Volume, Motor	3228019410	1	
23(SW801)	Switch, Push	4628054410	1	
24(SW291)	Switch, Push	4628043810	1	
25(SW292)	Switch, Push	4628049210	1	
26	Jack, Phone	4438005010	1	
27	Switch, Tact	4658003710	38	
28(SEN801)	Remote Sensor, TFMT5380 (38 kHz)	2408005001	1	
29(FIP801)	FIP, 12 LM 8, FL Display	2328130301	1	
30	Frame Right	6122632210	1	
31	Foot, ABS, Gold, Hot stamping	046033102511	2	
32	Foot, ABS, Black	6033102510	2	
33	Cover Bottom	6122418610	1	
34	Chassis, Front	6122214610	1	
35	Fastener	6528300110	2	
36	Heatsink Power	7502008310	1	
37	Bracket, Heat Sink	6505135910	1	
38	Clamp, Wire	6525002210	2	
39	Bracket, Heat Sink	6505135810	1	
40	Bracket, PCB	6505130010	2	
41	Frame left	6122632110	1	
42	Heatsink, Regulator TR.	7505206220	1	
43	Heatsink, Regulator TR.	7505202410	5	
44	Jack, RCA, 2P	4438108510	1	
45	Jack, RCA, 6P	4438108710	2	
46	Jack, RCA, 3P	4438108810	4	
47	Jack, RCA, 2P, Yellow	4438114210	1	
48	Terminal Speaker, 8P	4408105810	1	
49	Terminal Speaker, 4P	4408105410	1	
50	Terminal Speaker, 2P	4408108710	1	
51	Jack, Multiroom	4438006510	2	
52	Jack, RCA, 4P	4438108610	2	
53	Chassis, Back	046102041352	1	EUROPE
(53)	Chassis, Back	046102041322	1	USA/CANADA
54	Ground Terminal	4408103720	1	
55	Plug, Mono	4328208510	2	
56	△ Cord, AC Power	4308002310	1	
57	Stopper, AC Cord	6518000111	1	EUROPE
(57)	Stopper, AC Cord	6518000710	1	USA/CANADA
58	Cover Top, SECC, Black	046122022611	1	
59	△ Power Transformer, 230 V, 50 Hz	2828001117	1	EUROPE
(59)	△ Power Transformer, 120 V, 60 Hz	2828009967	1	USA/CANADA
60	Heatsink (H:30), Regulator TR.	7505206210	1	
61	Tie locking	6528002810	1	
62	△ Outlet, 1P	4448103610	1	EUROPE
(62)	△ Outlet, 3P	4448102910	1	USA/CANADA
63	Jack RCA, 2P	4438111510	1	
HARDWARE KIT				
S1	Screw #2 BTC 3 X 8 B	8109230083	37	
S2	Screw WSA4 4 X 8 B	8159440083	10	
S3	Screw #2 BTC 3 X 6 B	8109230063	5	
S4	Screw #2 FTC 3 X 8 B	8129230083	9	
S5	Screw #2 WPTC 3 X 8 Y	8159230081	9	
S6	HEX MSPW 3 X 12 Y	8099130121	6	
S7	HEX MSPW 3 X 16 Y	8099130161	2	
S8	Screw, Heatsink	8195000310	4	
S9	Screw #1 PTC 3 X 10 B	8119130103	21	
S10	Screw Ground	8155000710	2	
MISCELLANEOUS				
	Card Cable, 12P 450mm	4118612455	1	
	Card Cable, 15P 180mm	4118615189	1	
	Card Cable, 18P, 140mm	4118618149	1	
	Card Cable, 19P, 450mm	4118619459	1	
	Ass'y Posistor	052438012202	1	
	Posistor, PTH9M04BE222TS2F33	2438012200	2	

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol Δ in the parts list are of special significance to safety. When replacing a component identified with Δ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

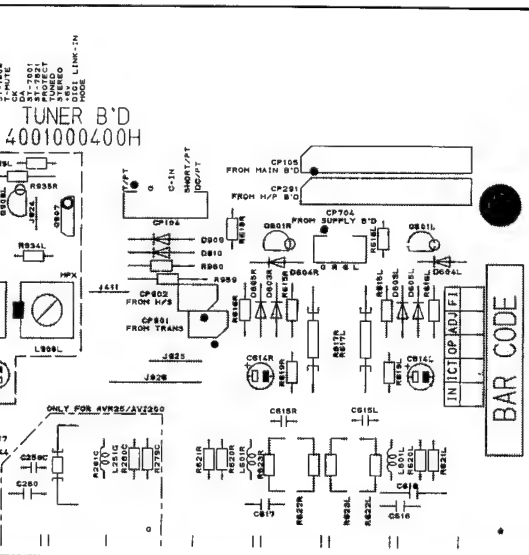
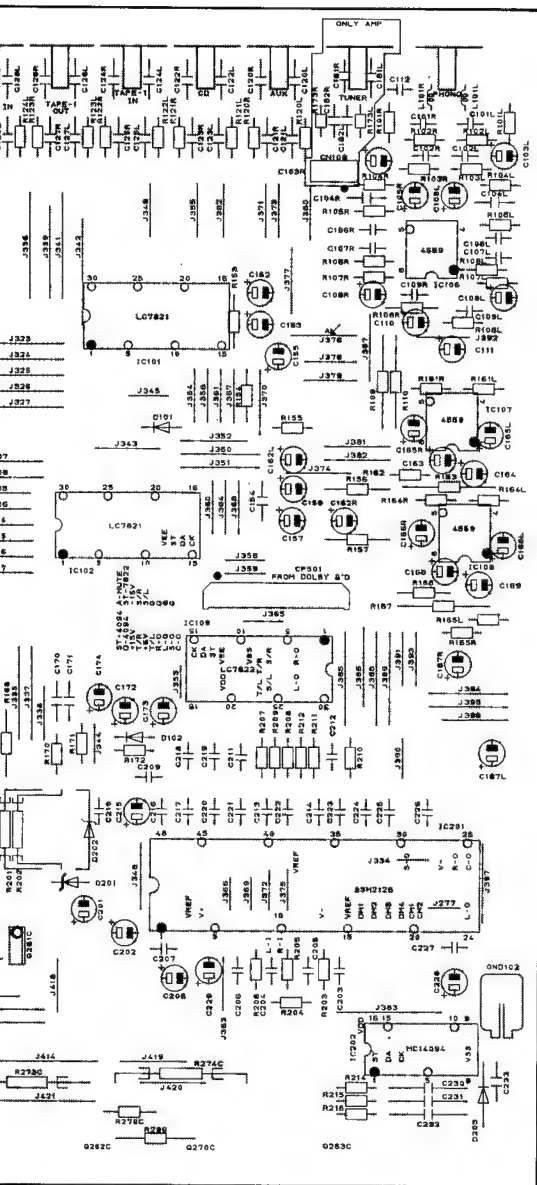
GENERAL UNIT



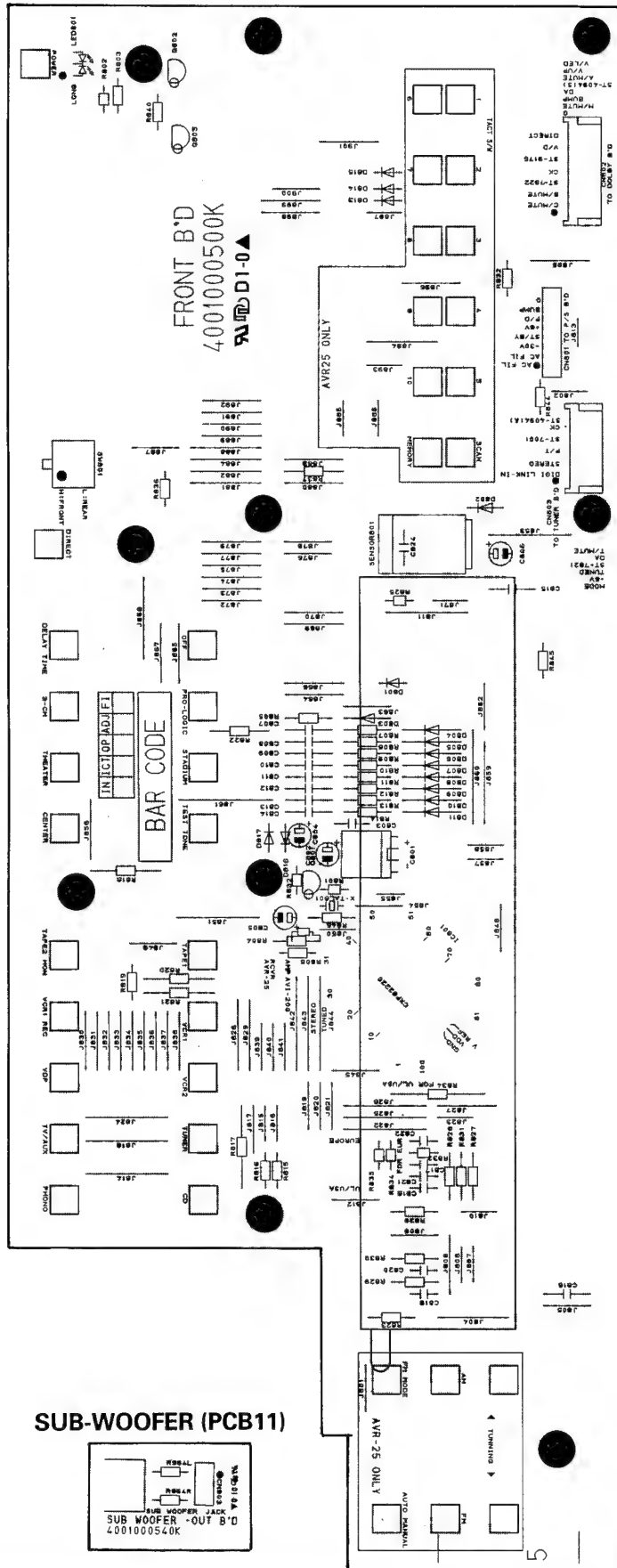


The diagram illustrates the internal wiring of a power supply unit. Key components and their connections include:

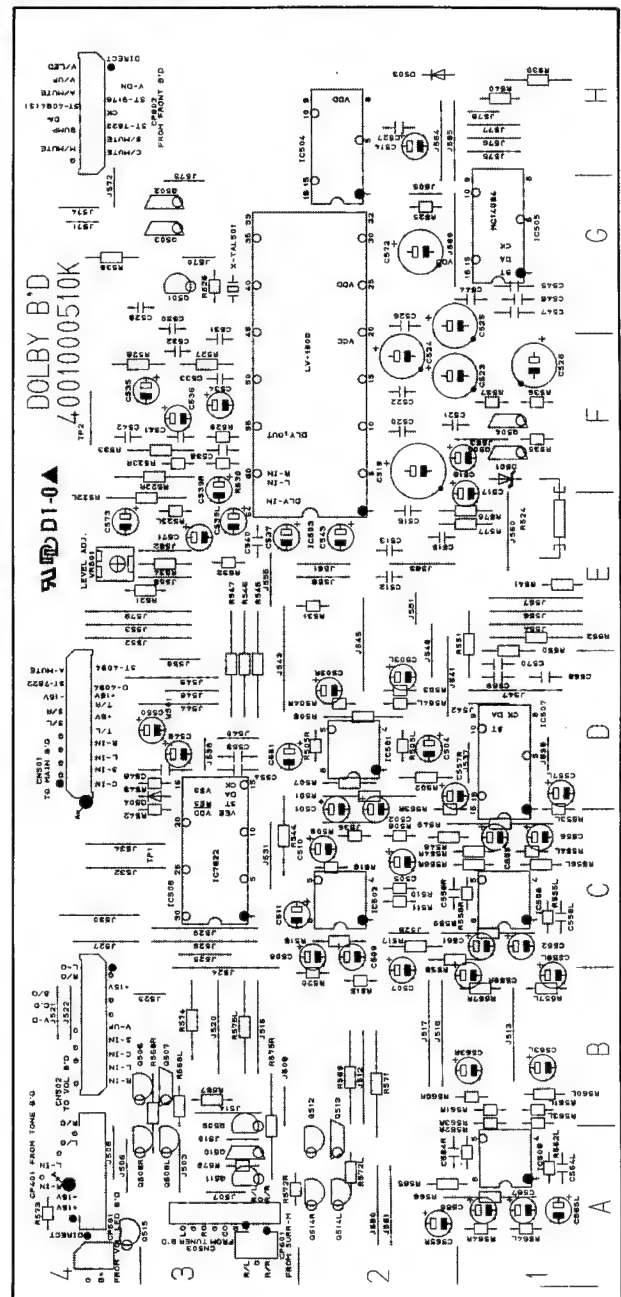
- Input Section:** Features a three-pin plug connected to BLUE, BLACK, and BLUE wires. These lead through fuses F901 and F702 to a switch assembly labeled J768 and J769.
- Filtering Stage:** A large electrolytic capacitor C701 is connected across the main power lines after the switch.
- Transformer Section:** A central transformer with multiple secondary windings provides various voltages. Taps are labeled with values like 0-250V, 0-125V, 0-6.3V, 0-3.15V, 0-1.5V, 0-0.75V, 0-0.375V, 0-0.187V, 0-0.093V, 0-0.047V, 0-0.023V, 0-0.011V, 0-0.005V, 0-0.002V, 0-0.001V, 0-0.0005V, 0-0.0002V, 0-0.0001V, 0-0.00005V, 0-0.00002V, 0-0.00001V.
- Regulation and Protection:** Several diodes (D701-D704) and transistors (T701-T704) are used for rectification and regulation. Resistors R701-R704 provide current limiting and biasing.
- Output Section:** The final output is taken from a terminal block labeled UL/CSANB315mA/125V EUROPEIT.L500mA/250V.

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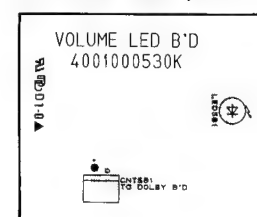
FRONT (PCB7)



DOLBY (PCB8)



VOLUME LED (PCB10)



ELECTRICAL PARTS LIST

PRODUCT SAFETY NOTICE : Products marked with Δ have special characteristics important to safety.

If you replace any of these components, read carefully the product safety notice in this manual.

Don't degrade the safety of the product through improper servicing.

Resistor/Capacitor tolerance – D : ($\pm 0.5\%$), J : ($\pm 5\%$), K : ($\pm 10\%$), M : ($\pm 20\%$), Z : +80, – 20%)

Ref. No.	Description	Mfr. Part No.	Q'ty	Version	Ref. No.	Description	Mfr. Part No.	Q'ty	Version
PCB1 ASSEMBLY P.C. BOARD MAIN					C256L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2
CAPACITORS					C257C	Electrolytic SA	10	uF 50 V M	3479210071 1
C101L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	C257L/R	Electrolytic SA	10	uF 50 V M	3479210071 2
C102L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	C258C	Electrolytic SA	4.7	uF 50 V M	3479247971 1
C103L/R	Electrolytic SA	4.7	uF 50 V M	3479247971 2	C258L/R	Electrolytic SA	4.7	uF 50 V M	3479247971 2
C104L/R	Ceramic Tubular	2200	pF 50 V J	3519222935 2	C259C	Electrolytic SA	10	uF 35 V M	3479210064 1
C105L/R	Electrolytic SA	33	uF 25 V M	3479233041 2	C259L/R	Electrolytic SA	10	uF 35 V M	3479210064 2
C106L/R	Mylar	0.002	uF 100 V J	3679182120 2	C260	Ceramic Tubular	2200	pF 16 V J	3519222915 1
C107L/R	Mylar	0.006	uF 100 V J	3679562120 2	C260L/R	Ceramic Tubular	2200	pF 50 V J	3519222935 2
C108L/R	Electrolytic SA	1	uF 50 V M	3479210971 2	C261L/R	Ceramic Tubular	2200	pF 50 V J	3519222935 2
C109L/R	Mylar	0.002	uF 100 V J	3679182120 2	C262L/R	Ceramic Tubular	2200	pF 50 V J	3519222935 2
C110/C111	Electrolytic SG	47	uF 25 V M	3479347041 2	C264C	Mylar	0.047	uF 100 V J	3679473120 1
C112	Ceramic Disc	0.01	uF 50 V Z	3579103530 1	C264L/R	Mylar	0.047	uF 100 V J	3679473120 2
C120L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	C265	Electrolytic SA	1	uF 100 V M	3479210997 1
C121L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	C266	Electrolytic SG	470	uF 10 V M	3479347121 1
C122L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	CONNECTORS				
C123L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	CN101	Lead Ass'y, 3P, 200 mm	436103203331	1	
C124L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	CN102	Lead Ass'y, 9P, 100 mm	436209103332	1	
C125L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	CN103	Lead Ass'y, 5P, 180 mm	436205183332	1	
C126L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	CN104	Lead Ass'y, 7P, 140 mm	436207143332	1	
C127L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	CN105	Lead Ass'y, 12P, 140 mm	435112143401	1	
C128L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	CP108	Wafer 3P	4428516210	1	
C129L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	CN108	Lead Ass'y, 3P, 200 mm	436403203232	1	
C130L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	CP402	Wafer 5P	4428516410	1	
C131L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	CP501	FPC Plug 19P	4428526310	1	
C132L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	CP241	Plug LV AC, 3P	4428525790	1	
C133L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2		Plug LV AC, 1P	4428525860	1	
C134L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	DIODES				
C135L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	D101-D103	1N4148M, Switching	2058322101	3	
C136L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	D201/D202	Zener, DZ 6.8BSC	2258599121	2	
C137L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	D203	1N4148M, Switching	2058322101	1	
C138L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	Δ D241-D244	PX6A03, Rectifier	2058100138	4	
C139L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	D251C	1N4148M, Switching	2058322101	1	
C140	Electrolytic SA	33	uF 25 V M	3479233041 1	D251L/R	1N4148M, Switching	2058322101	2	
C141	Electrolytic SG	470	uF 10 V M	3479347121 1	D252C	1N4148M, Switching	2058322101	1	
C142	Electrolytic SA	33	uF 25 V M	3479233041 1	D252L/R	1N4148M, Switching	2058322101	2	
C143-C146	Electrolytic SA	10	uF 50 V M	3479210071 4	D254	Zener, DZ 12.0BSC	2258599116	1	
C147/C148	Electrolytic SA	33	uF 25 V M	3479233041 2	INTEGRATED CIRCUITS				
C149	Electrolytic SA	2.2	uF 50 V M	3479222971 1	IC101/IC102	LC7821	2168017132	2	
C150-C153	Electrolytic SG	47	uF 25 V M	3479347041 4	IC103	GD4052B	2138001114	1	
C154	Ceramic Disc	0.01	uF 50 V Z	3579103530 1	IC104	BA7625, Video Switching	2168027106	1	
C155	Electrolytic SA	1	uF 50 V M	3479210971 1	IC105	MC14094BCP	2138009115	1	
C156/C157	Electrolytic SG	47	uF 25 V M	3479347041 2	Δ IC106-IC108	KIA4559P/KIA75559P, OP Amp	2168206104	3	
C158	Ceramic Tubular	1000	pF 50 V J	3519102935 1	IC109	LC7822	2168017139	1	
C159/C160	Ceramic Tubular	100	pF 50 V J	3519101935 2	IC201	SSM-2126A	2168000122	1	
C161	Ceramic Tubular	0.1	uF 50 V Z	3519104935 1	IC202	MC14094BCP	2138009115	1	
C162L/R	Electrolytic SA	4.7	uF 50 V M	3479247971 2	Δ IC241	GL7815, Regulator	2168601105	1	
C163/C164	Electrolytic SG	47	uF 25 V M	3479347041 2	Δ IC242	GL7806, Regulator	2168601110	1	
C165L/R	Electrolytic SA	4.7	uF 50 V M	3479247971 2	Δ IC243	GL7915, Regulator	2168601111	1	
C166L/R	Electrolytic SA	10	uF 50 V M	3479210071 2	COILS				
C167L/R	Electrolytic SA	10	uF 50 V M	3479210071 2	L101L/R	Inductor, 50 uH	2648601470	2	EUROPE
C168/C169	Electrolytic SG	47	uF 25 V M	3479347041 2	L251C	Inductor, 0.5 uH	2648001010	1	
C170/C171	Ceramic Tubular	100	pF 50 V J	3519101935 2	L251L/R	Inductor, 0.5 uH	2648001010	2	
C172	Electrolytic SG	47	uF 25 V M	3479347041 1	TRANSISTORS				
C173	Electrolytic SA	1	uF 50 V M	3479210971 1	Q101-Q103	BKTA1266Y/KTA1015Y, PNP	2208206105	3	
C174	Electrolytic SG	47	uF 25 V M	3479347041 1	Q251C	KTA2400-GG, PNP	2208006100	1	
C175-C177	Electrolytic SG	470	uF 10 V M	3479347121 3	Q251L/R	KTA2400-GG, PNP	2208006100	2	
C178	Ceramic Tubular	0.1	uF 50 V Z	3519104935 1	Q252C	KTA2400-GG, PNP	2208006100	1	
C179/C180	Electrolytic SA	10	uF 50 V M	3479210071 2	Q252L/R	KTA2400-GG, PNP	2208006100	1	
C181L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	Q253C	KTA2400-GG, PNP	2208006100	1	
C182L/R	Ceramic Tubular	100	pF 50 V J	3519101935 2	Q253L/R	KTA2400-GG, PNP	2208006100	2	
C201/C202	Electrolytic SG	220	uF 10 V M	3479322121 2	Q254C	BKTA1266Y/KTA1015Y, PNP	2208206105	1	
C203-C205	Mylar	0.01	uF 100 V J	3679103120 3	Q254L/R	BKTA1266Y/KTA1015Y, PNP	2208206105	2	
C206/C207	Mylar	0.22	uF 63 V K	3679224297 2	Q255C	KTC2240BL/KTC3200, NPN	2208606108	1	
C208	Electrolytic SA	4.7	uF 50 V M	3479247971 1	Q255L/R	KTC2240BL/KTC3200, NPN	2208606108	2	
C209-C212	Mylar	0.1	uF 63 V K	3679104297 4	Q256C	KTC2240BL/KTC3200, NPN	2208606108	1	
C213/C214	Poly	680	pF 50 V J	3619681110 2	Q256L/R	KTC2240BL/KTC3200, NPN	2208606108	2	
C215	Electrolytic SA	4.7	uF 50 V M	3479247971 1	Q257C	KTA949/KTA1024Y, PNP	2208206102	1	
C216/C217	Mylar	0.22	uF 63 V K	3679224297 2	Q257L/R	KTA949/KTA1024Y, PNP	2208206102	2	
C218-C221	Mylar	0.33	uF 63 V K	367934297 4	Q258C	KTC2229/KTC3206Y, NPN	2208606118	1	
C222-C225	Mylar	0.022	uF 100 V J	3679223120 4	Q258L/R	KTC2229/KTC3206Y, NPN	2208606118	2	
C226/C227	Mylar	0.1	uF 63 V K	3679104297 2	Q259C	KTA1268/KTA970, PNP	2008206104	1	
C228	Electrolytic SG	100	uF 10 V M	3479310121 1	Q259L/R	KTA1268/KTA970, PNP	2008206104	2	
C229	Electrolytic SA	10	uF 50 V M	3479210071 1	Q260C	2SC4883A-Y, NPN	2028316100	1	
C230-C232	Ceramic Tubular	100	pF 50 V J	3519101935 3	Q260L/R	2SC4883A-Y, NPN	2028316100	2	
C233	Ceramic Disc	0.01	uF 50 V Z	3579103530 1	Q261C	2SA1859A-Y, PNP	2028016100	1	
Δ C241/C242	Electrolytic HM	10000	uF 80 V M	3419510345 2	Q261L/R	2SA1859A-Y, PNP	2028016100	2	
C243-C247	Ceramic Disc	0.01	uF 500 V Z	3509103451 5	Q262C	2SC3182N-O, NPN	2028307101	1	
C248-C250	Electrolytic SA	1	uF 50 V M	3479210971 3	Q262L/R	2SC3518A, NPN	2028416122	2	
C251C	Electrolytic SG	47	uF 25 V M	3479347041 1	Q263C	2SA1265N-O, PNP	2028007101	1	
C251L/R	Electrolytic SG	47	uF 25 V M	3479347041 2	Q263L/R	2SA1386A, PNP	2028116108	2	
C252C	Ceramic Disc	68	pF 50 V J	3579680130 1	C264C	KTC3198Y/KTC1815Y, NPN	2208606104	1	
C252L/R	Ceramic Disc	68	pF 50 V J	3579680130 2	Q264L/R	KTC3198Y/KTC1815Y, NPN	2208606104	2	
C253C	Electrolytic SA	1	uF 50 V M	3479210971 1	Q265-Q267	KTC3198Y/KTC1815Y, NPN	2208606104	3	
C253L/R	Electrolytic SA	1	uF 50 V M	3479210971 2	Q268	BKTA1266Y/KTA1015Y, PNP	2208206105	1	
C254C	Ceramic Disc	3	pF 50 V D	3579309030 1					
C254L/R	Ceramic Disc	3	pF 50 V D	3579309030 2					
C255C	Electrolytic SG	470	uF 10 V M	3479347121 1					
C255L/R	Electrolytic SG	470	uF 10 V M	3479347121 2					
C256C	Ceramic Tubular	100	pF 50 V J	3519101935 1					

Ref. No.	Description	Mfr. Part No.	Q'ty	Version	Ref. No.	Description	Mfr. Part No.	Q'ty	Version					
R840	Carbon Film	100 ohm 1/5 W J	3069101970	1	CN601	CONNECTORS Lead Ass'y, 3P, 180 mm	436203183332	1						
R841	Carbon Film	47 kohm 1/5 W J	3069473970	1										
R842	Carbon Film	47 ohm 1/5 W J	3069470970	1										
R843	Carbon Film	270 ohm 1/5 W J	3069271970	1										
R844	Carbon Film	3.9 kohm 1/5 W J	3069392970	1										
R949/R950	Carbon Film	4.7 kohm 1/5 W J	3069472970	2	D601/602	DIODES 1N4002, Rectifier	2258100135	2						
R960L/R	Carbon Film	1 kohm 1/5 W J	3069102970	2										
R961L/R	Carbon Film	1 kohm 1/5 W J	3069102970	2										
R962C	Carbon Film	1 kohm 1/5 W J	3069102970	1	D606	1N4002, Rectifier	2258100135	1						
R963L/R	Carbon Film	1 kohm 1/5 W J	3069102970	2										
MISCELLANEOUS					IC601	INTEGRATED CIRCUIT STK4132 II, Hybrid IC	2178317129	1						
G901	Plate, Ground	4235007310	1											
49	Terminal Speaker, 4P	4408105410	1		R601L/R	RESISTORS Carbon Film	1 kohm 1/5 W J	3069102970	2					
51	Jack, Multiroom	4438006510	2											
52	Jack, RCA, 4P	4438108610	2											
PCB3 ASSEMBLY P.C. BOARD POWER SUPPLY														
CAPACITORS														
C701	Ceramic Disc	0.005 uF 400 V Z	3549472410	1						R607	Carbon Film	10 ohm 1/5 W J	3069100970	1
C702/C703	Ceramic Tubular	0.047 uF 50 V Z	3519473935	2						R608	Carbon Film	1.5 kohm 1/5 W J	3069152970	1
C704	Electrolytic SG	220 uF 16 V M	3479322131	1						R609	Carbon Film	1 kohm 1/5 W J	3069102970	1
C705	Electrolytic SA	1 uF 50 V M	3479210971	1						R610	Carbon Film	10 kohm 1/5 W J	3069103970	1
C706	Electrolytic SG	100 uF 50 V M	3479310171	1						R611	Carbon Film	390 kohm 1/5 W J	3069394970	1
C707-C711	Mylar	0.047 uF 100 V J	3679473120	5	R612	Carbon Film	68 kohm 1/5 W J	3069683970	1					
△ C712	Electrolytic SG	3300 uF 35 V M	3409333262	1	R613	Carbon Film	220 kohm 1/5 W J	3069224970	1					
△ C713	Electrolytic SG	2200 uF 35 V M	3409322269	1	R614	Carbon Film	4.7 kohm 1/5 W J	3069472970	1					
					R620	Carbon Film	100 ohm 1/5 W J	3069101970	1					
CONNECTORS					MISCELLANEOUS									
CN704	Lead Ass'y, 4P, 160 mm	436204163332	1		Plate, Ground									
CP101	Plug LV AC, 3P	4428525790	1		PCB5 ASSEMBLY P.C. BOARD TONE	CAPACITORS	22 pF 50 V J	3519220935	2					
CP602	Wafer 7P	4428516610	1											
CP701	Plug LV AC, 2P	4428525780	1											
CP702	Plug LV AC, 3P	4428525790	1											
CP703	Wafer 4P	4428505610	1											
CP801	Wafer 8P	4428516710	1											
DIODES														
△ D701-D704	1N4002, Rectifier	2258100135	4							C402L/R	Ceramic Tubular	22 pF 50 V J	3519220935	2
D705/D706	Zener, UZ 5.1BSB	2258599103	2		C403/C404	Electrolytic SG	47 uF 25 V M	3479347041	2					
D707/D708	1N4002, Rectifier	2258100135	2		C405L/R	Electrolytic SA	10 uF 50 V M	3479210071	2					
D709	Zener, UZ 7.5BSC	2258599130	1		C406L/R	Electrolytic SA	10 uF 50 V M	3479210071	2					
D710/D711	Zener, UZ 15.0BSC	2258599109	2		C407L/R	Ceramic Disc	39 pF 50 V J	3579390130	2					
△ D712-D715	1N5402, Rectifier	2058100136	4		C409L/R	Ceramic Tubular	39 pF 50 V J	3519390635	2					
D716	Zener, UZ 5.1BSB	2258599103	1		C410L/R	Electrolytic SA	10 uF 50 V M	3479210071	2					
INTEGRATED CIRCUIT GL7806, Regulator					C411/C412	Electrolytic SG	47 uF 25 V M	3479347041	2					
△ IC701		2168601110	1		C413L/R	Electrolytic SA	10 uF 50 V M	3479210071	2					
TRANSISTOR KTC3198Y/KTC1815Y, NPN					C414L/R	Mylar	0.015 uF 100 V J	3679153120	2					
Q701		2208606104	1		C415L/R	Mylar	0.082 uF 100 V J	3679823120	2					
RESISTORS					C417L/R	Mylar	0.003 uF 100 V J	3679332120	2					
R701	Metal Film	10 ohm 1 W J	3029100470	1	C418L/R	Mylar	0.018 uF 100 V J	3679183120	2					
R702	Carbon Film	2 kohm 1/5 W J	3069202970	1	C431L/R	Ceramic Tubular	100 pF 50 V J	3519101935	2					
R703	Carbon Film	330 ohm 1/5 W J	3069331970	1	C432L/R	Ceramic Tubular	100 pF 50 V J	3519101935	2					
R704	Carbon Film	15 kohm 1/5 W J	3069153970	1	C433	Ceramic Tubular	100 pF 50 V J	3519101935	1					
R706	Carbon Film	6.8 kohm 1/5 W J	3069682970	1	CONNECTORS									
R707	Carbon Film	1 kohm 1/5 W J	3069102970	1	CN401	Lead Ass'y, 10P, 220 mm	436210223332	1						
R708	Carbon Film	10 kohm 1/5 W J	3069103970	1	CN402	Lead Ass'y, 5P, 400 mm	436205403332	1						
FUSES					DIODE									
F701	△ TL 4A 250V	5508302935	1	EUROPE	D401	1N4148M, Switching	2058322101	1						
	△ SB 4A 125V	5508102921	1	USA/CANADA	INTEGRATED CIRCUITS									
F702	△ TL 4A 250V	5508302935	1	EUROPE	IC401/IC402	KIA4559P/KIA75559P, OP Amp	2168206104	2						
	△ SB 4A 125V	5508102921	1	USA/CANADA	Q401	BKTA1266Y/KTA1015Y, PNP	2208206105	1						
F703	△ TL 4A 250V	5508302935	1	EUROPE										
	△ SB 6A 125V	5508103121	1	USA/CANADA	Q402	DTC114YS	2208622106	1						
F704	△ TL 500mA 250V	5508301635	1	EUROPE	RESISTORS									
	△ NB 315mA 125V	5508201521	1	USA/CANADA	R401L/R	Carbon Film	100 kohm 1/5 W J	3069104970	2					
F705	△ TL 2.5A 250V	5508302535	1	EUROPE	R402L/R	Carbon Film	1 kohm 1/5 W J	3069102970	2					
MISCELLANEOUS					R403L/R	Carbon Film	5.1 kohm 1/5 W J	3069512970	2					
RLY701	Relay, HR-CR313(TV-3)	5528042002	1		R404L/R	Carbon Film	560 ohm 1/5 W J	3069561970	2					
G701	Plate, Ground	4235007310	1		R405L/R	Carbon Film	100 kohm 1/5 W J	3069104970	2					
G702	Plate, Ground	4235007310	1		R406L/R	Carbon Film	1 kohm 1/5 W J	3069102970	2					
60	Heatsink (H:30), Regulator TR.	7505206210	1		R407L/R	Carbon Film	100 kohm 1/5 W J	3069104970	2					
61	Tie locking	6528002810	1		R408L/R	Carbon Film	120 kohm 1/5 W J	3069124970	2					
62	△ Outlet, 1P	4448103610	1	EUROPE	R409L/R	Carbon Film	1 Mohm 1/5 W J	3069105970	2					
(62)	△ Outlet, 3P	4448102910	1	USA/CANADA	R410/R411	Carbon Film	220 ohm 1/5 W J	3069221970	2					
	△ Standby Transformer, 230 V 50 Hz	2828000077	1	EUROPE	R412L/R	Carbon Film	560 ohm 1/5 W J	3069561970	2					
	△ Standby Transformer, 120 V 60 Hz	2828089007	1	USA/CANADA	R413L/R	Carbon Film	100 kohm 1/5 W J	3069104970	2					
	Pin, Solder	4228001410	2		R414/R415	Carbon Film	220 ohm 1/5 W J	3069221970	2					
	Clip Fuse	4255001010	8		R416L/R	Carbon Film	20 kohm 1/5 W J	3069203970	2					
PCB4 ASSEMBLY P.C. BOARD SURROUND					R418L/R	Carbon Film	3.9 kohm 1/5 W J	3069392970	2					
CAPACITORS					R419L/R	Carbon Film	2.2 kohm 1/5 W J	3069222970	2					
C601L/R	Ceramic Tubular	2200 pF 50 V J	3519222935	2	R420L/R	Carbon Film	560 ohm 1/5 W J	3069561970	2					
C602L/R	Electrolytic SA	2.2 uF 50 V M	3479222971	2	R421L/R	Carbon Film	1.2 kohm 1/5 W J	3069122970	2					
C603L/R	Ceramic Tubular	100 pF 50 V J	3519101935	2	R422L/R	Carbon Film	1.2 kohm 1/5 W J	3069122970	2					
C604L/R	Electrolytic SA	2.2 uF 50 V M	3479222971	2	R423	Carbon Film	12 kohm 1/5 W J	3069123970	1					
C605L/R	Ceramic Tubular	4.7 pF 50 V J	3519047935	2	R424	Carbon Film	100 ohm 1/5 W J	3069101970	1					
C606L/R	Electrolytic SA	47 uF 35 V M	3479247061	2	R425/R426	Carbon Film	3.6 kohm 1/5 W J	3069362970	2					
C607	Mylar	0.1 uF 63 V K	3679104297	1	R431L/R	Carbon Film	470 ohm 1/5 W J	3069471970	2					
C608/C809	Electrolytic SA	10 uF 50 V M	3479210071	2	MISCELLANEOUS									
C610/C611	Electrolytic SA	10 uF 50 V M	3479210071	2	RLY401	Relay, G5V-2-H1	5528040001	1						
C612/C613	Ceramic Tubular	2200 uF 50 V Z	3519222935	2	18	Volume Rotary (Bass/Treble)	3208049510	2						
					19	Volume Rotary (Balance)	3208052010	1						
					20	Jack, RCA, 3P	4438109710	1						

Ref. No.	Description	Mfr. Part No.	Q'ty.	Version	Ref. No.	Description	Mfr. Part No.	Q'ty.	Version				
PCB6 ASSEMBLY P.C. BOARD VOLUME					C511	Electrolytic SA	3.3	uF	50 V M	3479233971	1		
CAPACITORS					C512	Mylar	0.15	uF	63 V K	3679154297	1		
C301/L/R	Ceramic Tubular	470	pF	50 V J	3519471935	2	C513	Ceramic Tubular	150	pF	50 V J	3519151935	1
C302/L/R	Mylar	0.082	uF	100 V J	3679823120	2	C514	Electrolytic SG	220	uF	10 V M	3479322121	1
C303	Electrolytic SG	47	uF	25 V M	3479347041	1	C515	Poly	120	pF	50 V J	3619121110	1
C304/C305	Electrolytic SG	100	uF	10 V M	3479310121	2	C516	Poly	680	pF	50 V J	3619681110	1
C306	Ceramic Disc	0.047	uF	50 V Z	3579473530	1	C517	Electrolytic SA	4.7	uF	50 V M	3479247971	1
CONNECTOR					C518	Electrolytic SG	47	uF	50 V M	3479347071	1		
CP502	FPC Plug, 18P	4428526305	1		C519	Electrolytic SG	470	uF	10 V M	3479347121	1		
INTEGRATED CIRCUIT					C520	Poly	680	pF	50 V J	3619681110	1		
IC301	TA7291S	2168007204	1		C521	Mylar	0.022	uF	100 V J	3679223120	1		
RESISTOS					C522	Poly	150	pF	50 V J	3619151110	1		
R301/L/R	Carbon Film	51	kohm	1/5 W J	3069513970	2	C523-C525	Electrolytic SG	220	uF	16 V M	3479322131	3
R302/L/R	Carbon Film	6.2	kohm	1/5 W J	3069622970	2	C526/C527	Ceramic Tubular	0.1	uF	50 V Z	3519104935	2
R303/R304	Carbon Film	6.2	kohm	1/5 W J	3069622970	2	C528	Electrolytic SA	1	uF	50 V M	3479210971	1
R305	Carbon Film	33	ohm	1/5 W J	3069330970	1	C529	Mylar	0.22	uF	63 V K	3679224297	1
R306	Carbon Film	15	kohm	1/5 W J	3069153970	1	C530	Mylar	0.068	uF	100 V J	3679683120	1
R307	Carbon Film	4.7	kohm	1/5 W J	3069472970	1	C531	Mylar	0.004	uF	100 V J	3679392120	1
MISCELLANEOUS					C532	Mylar	0.005	uF	100 V J	3679472120	1		
W301	Wire Lug, #24, Black, 140mm	152624101457	2		C533	Mylar	0.033	uF	100 V J	3679333120	1		
21(SW301)	Switch Push	4628059610	1		C534	Electrolytic SA	10	uF	50 V M	3479210071	1		
22(VR301)	Volume Motor	3228019410	1		C535	Electrolytic SA	1	uF	50 V M	3479210971	1		
S1	Screw #2 BTC 3 X 8 B	8109230083	1		C536/C537	Electrolytic SA	10	uF	50 V M	3479210071	2		
S3	Screw #2 BTC 3 X 6 B	8109230063	1		C538	Ceramic Tubular	470	pF	50 V J	3519471935	1		
PCB7 ASSEMBLY P.C. BOARD FRONT					C539L/R	Electrolytic SA	10	uF	50 V M	3479210071	2		
CAPACITORS					C540	Ceramic Tubular	680	pF	50 V J	3519681935	1		
C801	CAP, FMOH473ZTP16, Backup	5.5 V	3409347314	1	C541	Mylar	0.006	uF	100 V J	3679562120	1		
C802	Electrolytic SG	47	uF	25 V M	3479347041	1	C542	Mylar	0.005	uF	100 V J	3679472120	1
C803	Ceramic Tubular	0.1	uF	50 V Z	3519104935	1	C543	Electrolytic SA	10	uF	50 V M	3479210071	1
C804	Electrolytic SA	10	uF	50 V M	3479210071	1	C544	Ceramic Tubular	0.1	uF	50 V Z	3519104935	1
C805	Ceramic Tubular	12	pF	50 V J	3519120935	1	C545-C547	Ceramic Tubular	100	pF	50 V J	3519101935	3
C806	Electrolytic SA	33	uF	25 V M	3479233041	1	C548	Ceramic Tubular	0.01	uF	50 V Z	3519103935	1
C807-C814	Ceramic Tubular	100	pF	50 V J	3519101935	8	C549	Electrolytic SA	1	uF	50 V M	3479210971	1
C815/C816	Ceramic Tubular	0.047	uF	50 V Z	3519473935	2	C550/C551	Electrolytic SG	47	uF	25 V M	3479347041	2
C817-C821	Ceramic Tubular	100	pF	50 V J	3519101935	5	C553/C554	Ceramic Tubular	100	pF	50 V J	3519101935	2
C822	Ceramic Tubular	0.1	uF	50 V Z	3519104935	1	C555/C556	Electrolytic SG	47	uF	25 V M	3479347041	2
C824	Ceramic Tubular	0.1	uF	50 V Z	3519104935	1	C557L/R	Electrolytic SA	1	uF	50 V M	3479210971	2
CONNECTORS					C558L/R	Ceramic Tubular	0.001	uF	50 V Z	3519102935	2		
CN801	Lead Ass'y, 8P 350 mm	436208353332	1		C559L/R	Electrolytic SA	22	uF	25 V M	3479222041	2		
CN802	FPC Plug 15P	4428526690	1		C561/C562	Electrolytic SG	47	uF	25 V M	3479347041	2		
CN803	FPC Plug 12P	4428526246	1		C563L/R	Electrolytic SA	1	uF	50 V M	3479210971	2		
DIODES					C564L/R	Ceramic Tubular	0.001	uF	50 V Z	3519102935	2		
D801-D816	1N4148M, Switching	2058322101	6		C565L/R	Electrolytic SA	3.3	uF	50 V M	3479233971	2		
LED801	LED, SPR54MWW3, Red/Green	2308222302	1		C566/C567	Electrolytic SG	47	uF	25 V M	3479347041	2		
INTEGRATED CIRCUIT					C568-C570	Ceramic Tubular	100	pF	50 V J	3519101935	3		
IC801	CPX82220-107Q, CPU	2138322182	1		C571	Electrolytic SA	10	uF	50 V M	3479210071	1		
TRANSISTORS					C572	Electrolytic SG	220	uF	16 V M	3479322131	1		
Q801	MPSA06Y, NPN	2208606114	1		C573	Electrolytic SA	10	uF	50 V M	3479210071	1		
Q802	KTC3198Y/KTC1815Y, NPN	2208606104	1		CONNECTORS								
Q803	DTA114YS, PNP	2208222105	1		CN501	FPC Plug 19P	4428526310	1					
RESISTORS					CN502	FPC Plug 18P	4428526305	1					
R801	Carbon Film	10	kohm	1/5 W J	3069103970	1	CN503	Lead Ass'y, 9P, 450 mm	436209453332	1			
R802	Carbon Film	180	ohm	1/5 W J	3069181970	1	CP401	Wafer 10P	4428516910	1			
R803	Carbon Film	150	ohm	1/5 W J	3069151970	1	CP581	Wafer 2P	4428508210	1			
R804	Carbon Film	22	kohm	1/5 W J	3069223970	1	CP601	Wafer 3P	4428516210	1			
R805	Carbon Film	47	kohm	1/5 W J	3069473970	1	CP802	FPC Plug 15P	4428526270	1			
R806	Carbon Film	10	kohm	1/5 W J	3069103970	1	DIODES						
R807-R814	Carbon Film	1	kohm	1/5 W J	3069102970	8	D501	Zener, UZ 12.0BSC	2258599116	1			
R815-R822	Carbon Film	47	kohm	1/5 W J	3069473970	8	D502-D504	1N4148M, Switching	2058322101	3			
R823	Carbon Film	1	kohm	1/5 W J	3069224970	1	INTEGRATED CIRCUITS						
R825	Carbon Film	3.3	kohm	1/5 W J	3069332970	1	IC501/IC502	KIA4559P/KIA75559P, OP Amp	2168206104	2			
R827-R831	Carbon Film	100	ohm	1/5 W J	3069101970	5	IC503	LV-1000NA	2168017142	1			
R832	Carbon Film	1	kohm	1/5 W J	3069102970	1	IC504	DRAM, uPD61256-08	2138430001	1			
R834/R835	Carbon Film	47	kohm	1/5 W J	3069473970	2	IC505	MC14094BCP	2138009115	1			
R836	Carbon Film	470	ohm	1/5 W J	3069471970	1	IC506	LC7822	2168017139	1			
R837	Carbon Film	1	kohm	1/5 W J	3069102970	1	IC507	TC9176P	2138007124	1			
R838	Carbon Film	330	ohm	1/5 W J	3069331970	1	IC508/IC509	KIA4559P/KIA75559P, OP Amp	2168206104	2			
R839	Carbon Film	47	kohm	1/5 W J	3069473970	1	TRANSISTORS						
R844/R845	Carbon Film	3.3	ohm	1/5 W J	3069339970	2	Q501	BKTA1266Y/KTA1015Y, PNP	2208206105	1			
MISCELLANEOUS					Q502	DTC114YS	2208622106	1					
X-TAL801	Resonator, CST10.00MTW	3938131750	1		Q503	DTA114YS, PNP	2208222105	1					
23(SW801)	Switch Push	4628054410	1		Q504/Q505	DTC114YS	2208622106	2					
27	Switch Tact	4658003710	38		Q506	KTC3198Y/KTC1815Y, NPN	2208606104	1					
28(SEN801)	Remote Sensor, TFMT5380 (38 kHz)	2408005001	1		Q507	DTA114YS, PNP	2208222105	1					
29(FIP801)	FIP, 12 LM 8, FL Display	2328130301	1		Q508L/R	KTD1302, NPN	2208606112	2					
PCB8 ASSEMBLY P.C. BOARD DOLBY					Q509	KTC3198Y/KTC1815Y, NPN	2208606104	1					
CAPACITORS					Q510	DTA114YS, PNP	2208222105	1					
C501/C502	Electrolytic SG	47	uF	25 V M	3479347041	2	Q511	KTD1302, NPN	2208606112	1			
C503L/R	Electrolytic SA	4.7	uF	50 V M	3479247971	2	Q512	KTC3198Y/KTC1815Y, NPN	2208606104	1			
C504	Electrolytic SA	3.3	uF	50 V M	3479233971	1	Q513	DTA114YS, PNP	2208222105	1			
C505	Electrolytic SA	10	uF	50 V M	3479210071	1	Q514L/R	KTD1302, NPN	2208606112	2			
C507	Electrolytic SA	3.3	uF	50 V M	3479233971	1	Q515	KTC3198Y/KTC1815Y, NPN	2208606104	1			
C508/C509	Electrolytic SG	47	uF	25 V M	3479347041	2	RESISTORS						
C510	Electrolytic SA	2.2	uF	50 V M	3479222971	1	R501/R502	Carbon Film	100	ohm	1/5 W J	3069101970	2
PCB9 ASSEMBLY P.C. BOARD DOLBY					R503	Carbon Film	10	kohm	1/5 W J	3069103970	1		
CAPACITORS					R504L	Carbon Film	10	kohm	1/5 W J	3069103970	1		
C501/C502	Electrolytic SG	47	uF	25 V M	3479347041	2	R504R	Carbon Film	22	kohm	1/5 W J	3069223970	1
C503L/R	Electrolytic SA	4.7	uF	50 V M	3479247971	2	R505L/R	Carbon Film	22	kohm	1/5 W J	3069223970	2
C504	Electrolytic SA	3.3	uF	50 V M	3479233971	1	R506	Carbon Film	22	kohm	1/5 W J	3069223970	1
C505	Electrolytic SA	10	uF	50 V M	3479210071	1	R507	Carbon Film	1.5	kohm	1/5 W J	3069152970	1
C507	Electrolytic SA	3.3	uF	50 V M	3479233971	1	R508	Carbon Film	750	ohm	1/5 W J	3069751970	1
C508/C509	Electrolytic SG	47	uF	25 V M	3479347041	2	R509	Carbon Film	1.8	kohm	1/5 W J	3069182970	1
C510	Electrolytic SA	2.2	uF	50 V M	3479222971	1	R510	Carbon Film	3.9	kohm	1/5 W J	3069392970	1

Ref. No.	Description		Mfr. Part No.	Q'ty	Version
R511	Carbon Film	4.7 kohm 1/5 W J	3069472970	1	
R515	Carbon Film	3.3 kohm 1/5 W J	3069332970	1	
R516/R517	Carbon Film	100 ohm 1/5 W J	3069101970	2	
R519	Carbon Film	10 kohm 1/5 W J	3069103970	1	
R520	Carbon Film	100 kohm 1/5 W J	3069104970	1	
R521	Carbon Film	3.9 kohm 1/5 W J	3069392970	1	
R522/L/R	Carbon Film	6.8 kohm 1/5 W J	3069682970	2	
R523/L/R	Carbon Film	100 kohm 1/5 W J	3069104970	2	
R524	Metal Film	56 ohm 1 W J	3029560470	1	
R525	Carbon Film	56 ohm 1/5 W J	3069560970	1	
R526	Carbon Film	1 Mohm 1/5 W J	3069105970	1	
R527	Carbon Film	47 kohm 1/5 W J	3069473970	1	
R528	Carbon Film	3.3 kohm 1/5 W J	3069332970	1	
R529	Carbon Film	15 kohm 1/5 W J	3069153970	1	
R530	Carbon Film	8.2 kohm 1/5 W J	3069822970	1	
R531	Carbon Film	100 kohm 1/5 W J	3069104970	1	
R532	Carbon Film	39 kohm 1/5 W J	3069393970	1	
R533/R534	Carbon Film	8.2 kohm 1/5 W J	3069822970	2	
R535	Carbon Film	47 kohm 1/5 W J	3069473970	1	
R536	Carbon Film	5.6 kohm 1/5 W J	3069562970	1	
R537	Carbon Film	1 kohm 1/5 W J	3069102970	1	
R538	Carbon Film	10 kohm 1/5 W J	3069103970	1	
R539-R541	Carbon Film	1 kohm 1/5 W J	3069102970	3	
R542	Carbon Film	220 ohm 1/5 W J	3069221970	1	
R543	Carbon Film	100 kohm 1/5 W J	3069104970	1	
R544	Carbon Film	220 ohm 1/5 W J	3069221970	1	
R545-R547	Carbon Film	1 kohm 1/5 W J	3069102970	3	
R548/R549	Carbon Film	220 ohm 1/5 W J	3069221970	2	
R550-R552	Carbon Film	1 kohm 1/5 W J	3069102970	3	
R553/L/R	Carbon Film	680 ohm 1/5 W J	3069681970	2	
R554/L/R	Carbon Film	1 Mohm 1/5 W J	3069105970	2	
R555/L/R	Carbon Film	4.7 kohm 1/5 W J	3069472970	2	
R556/L/R	Carbon Film	1.5 kohm 1/5 W J	3069152970	2	
R557/L/R	Carbon Film	2 kohm 1/5 W J	3069202970	2	
R558/R559	Carbon Film	100 ohm 1/5 W J	3069101970	2	
R560/L/R	Carbon Film	680 ohm 1/5 W J	3069681970	2	
R561/L/R	Carbon Film	1 Mohm 1/5 W J	3069105970	2	
R562/L/R	Carbon Film	4.7 kohm 1/5 W J	3069472970	2	
R563/L/R	Carbon Film	1.5 kohm 1/5 W J	3069152970	2	
R564/L/R	Carbon Film	2 kohm 1/5 W J	3069202970	2	
R565/R566	Carbon Film	100 ohm 1/5 W J	3069101970	2	
R567	Carbon Film	2.2 kohm 1/5 W J	3069222970	1	
R568/L/R	Carbon Film	2.2 kohm 1/5 W J	3069222970	2	
R569-R571	Carbon Film	2.2 kohm 1/5 W J	3069222970	3	
R572/L/R	Carbon Film	2.2 kohm 1/5 W J	3069222970	2	
R573	Carbon Film	820 ohm 1/5 W J	3069821970	1	
R574	Carbon Film	1 kohm 1/5 W J	3069102970	1	
R575/L/R	Carbon Film	1 kohm 1/5 W J	3069102970	2	
R576/R577	Carbon Film	220 kohm 1/5 W J	3069224970	2	

MISCELLANEOUS

X-TAL501	Resonator, CST8.00MTW	3938131590	1	
VR501	Semi Fixed Resistor, 10 k (B)	3248010343	1	
W501	CTB 0135 LV DIAMOND DL B#16	4359855035	1	

PCB9 ASSEMBLY P.C. BOARD HEADPHONE

R295/L/R	RES, Metal Film	470 ohm 2 W J	30294711570	2
C291/L/R	CAP, Ceramic Tub	560 pF 50 V J	3519561935	2
CN291	Lead Ass'y, 12P, 350 mm		435112353401	1
24(SW291)	Switch Push		4628043810	1
25(SW292)	Switch Push		4628049210	1
26	Jack, Phone		4438005010	1

PCB10 ASSEMBLY P.C. BOARD VOLUME LED

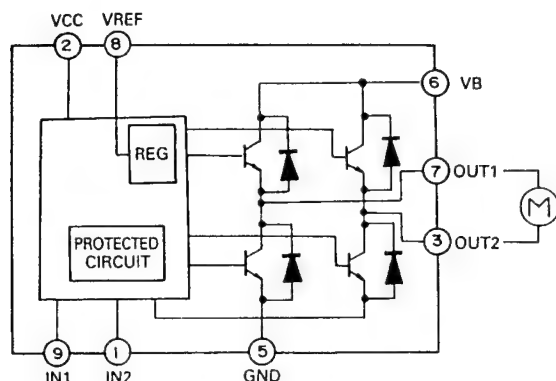
CNT581	Lead Ass'y, 2P, 180 mm, 2.5 mm Pitch	4358102184	1	
LED581	LED, SLC-22VRS, Green	2306220324	1	

PCB11 ASSEMBLY P.C. BOARD SUB-WOOFER

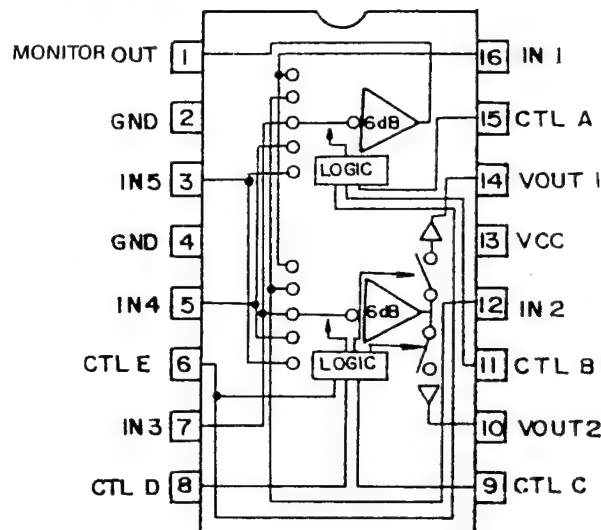
CN903	Lead Ass'y, 3P, 180mm	436203183332	1	
R964/L/R	RES, Carbon Film	1 kohm 1/5 W J	3069102970	1
63	Jack RCA, 2P	4438111510	1	

IC FUNCTIONAL BLOCK DIAGRAM

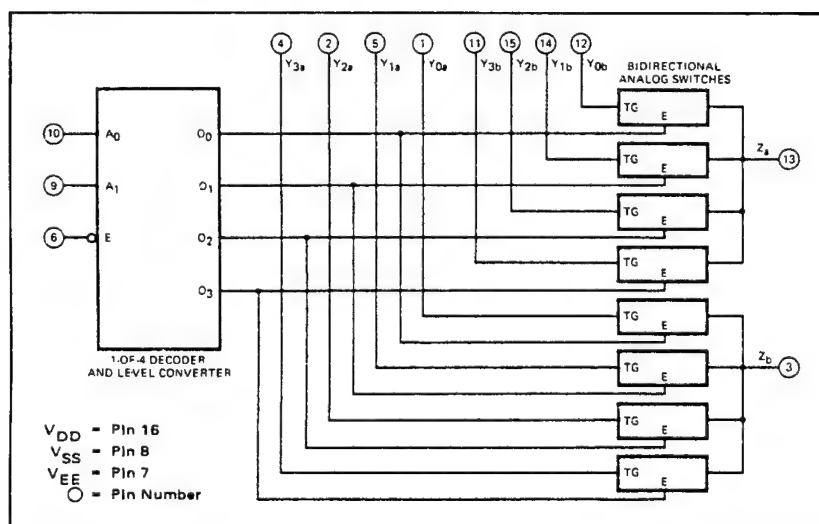
IC301 TA7291S



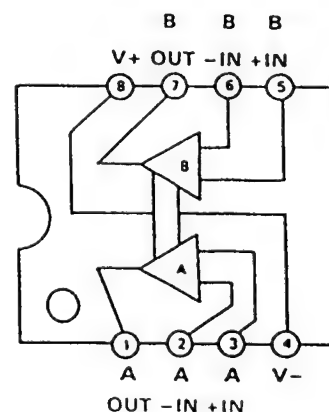
IC104 BA7625



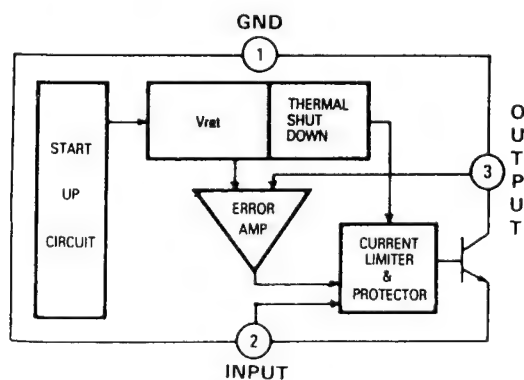
IC103 GD4052B



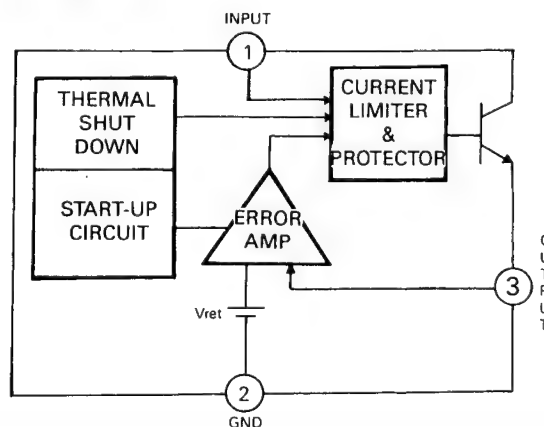
IC106, IC107, IC108, IC401, IC402
 IC501, IC502, IC508, IC509
 KIA4559/KIA75559P



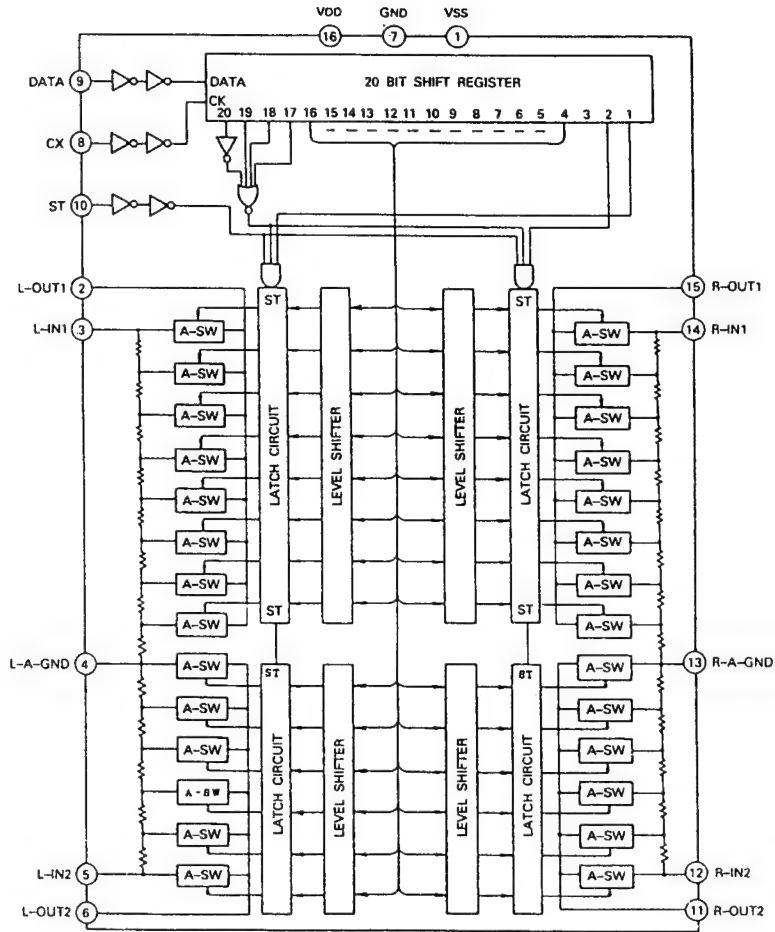
IC243 GL7915



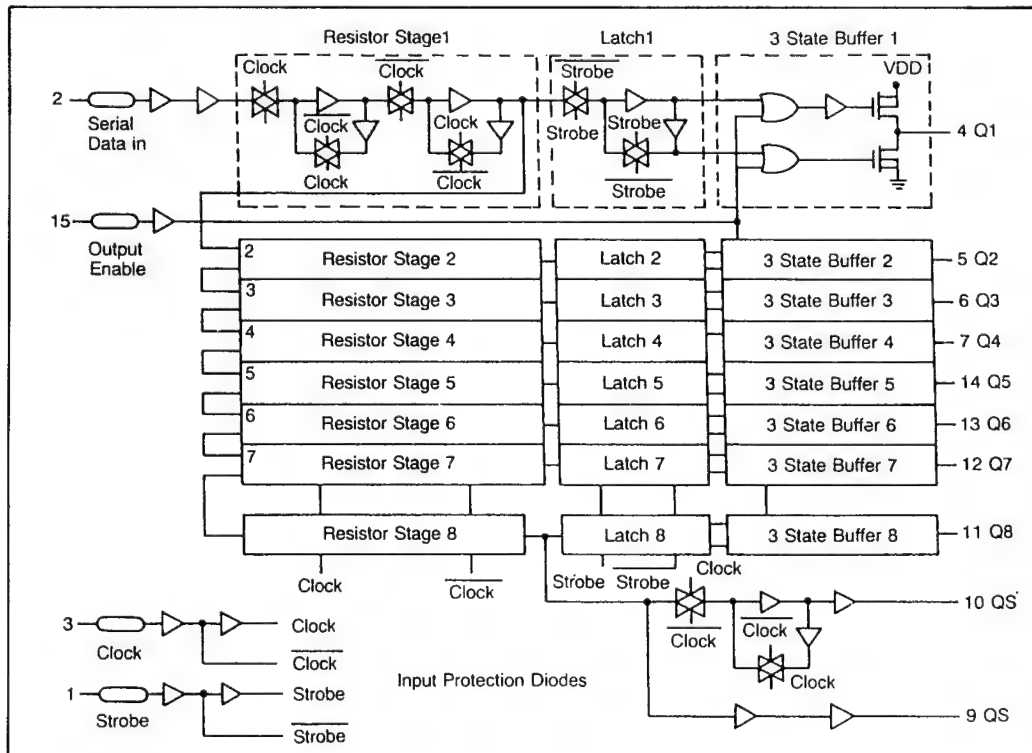
IC242, IC701 GL7806
 IC241 GL7815



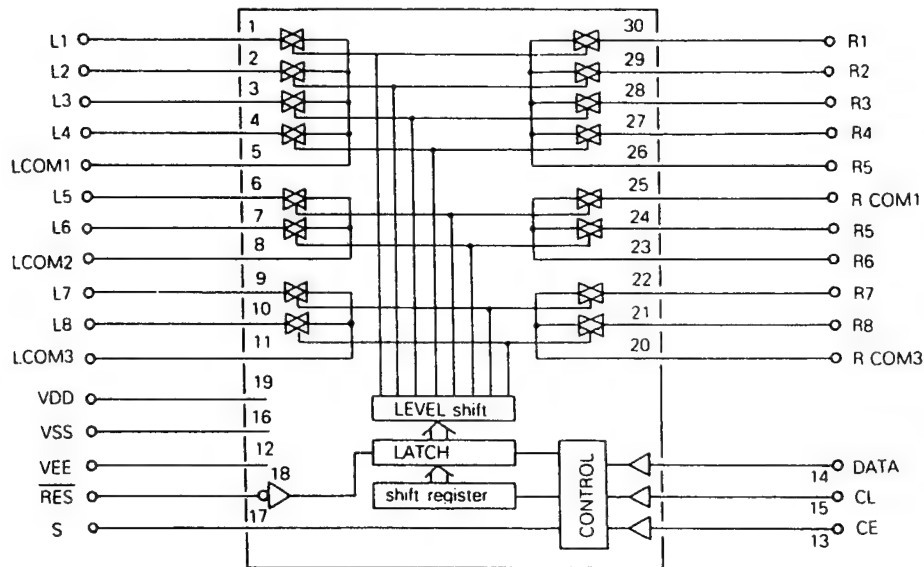
IC507 TC9176P



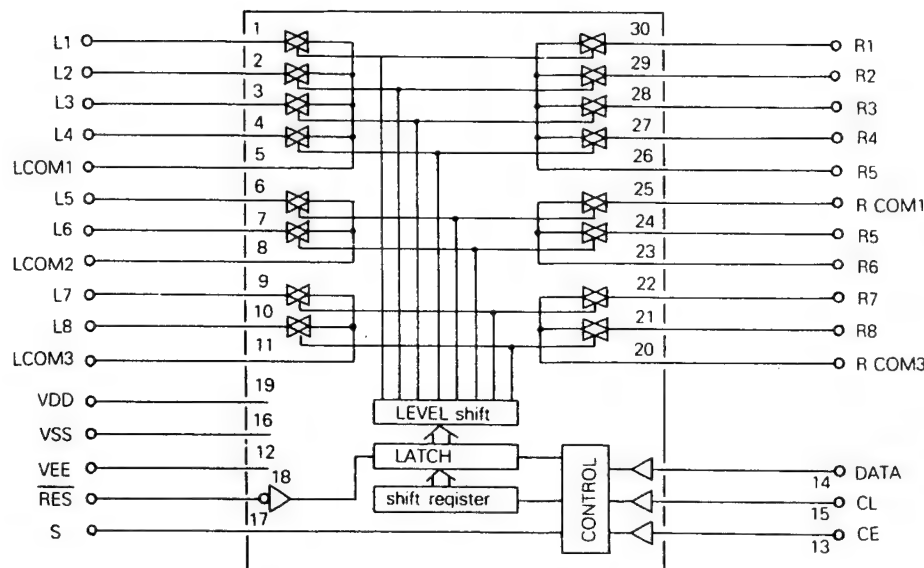
IC105, IC202, IC505 MC14094



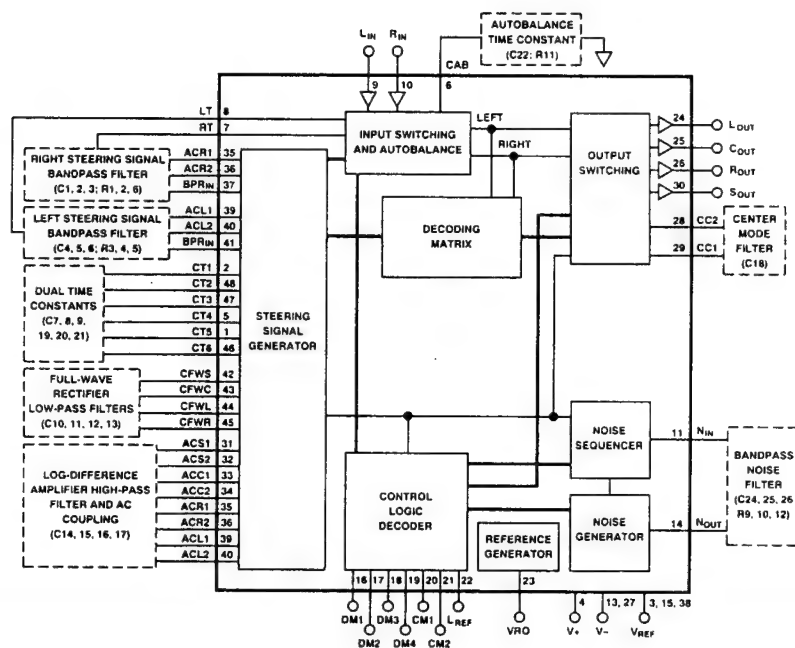
IC101, IC102 LC7821

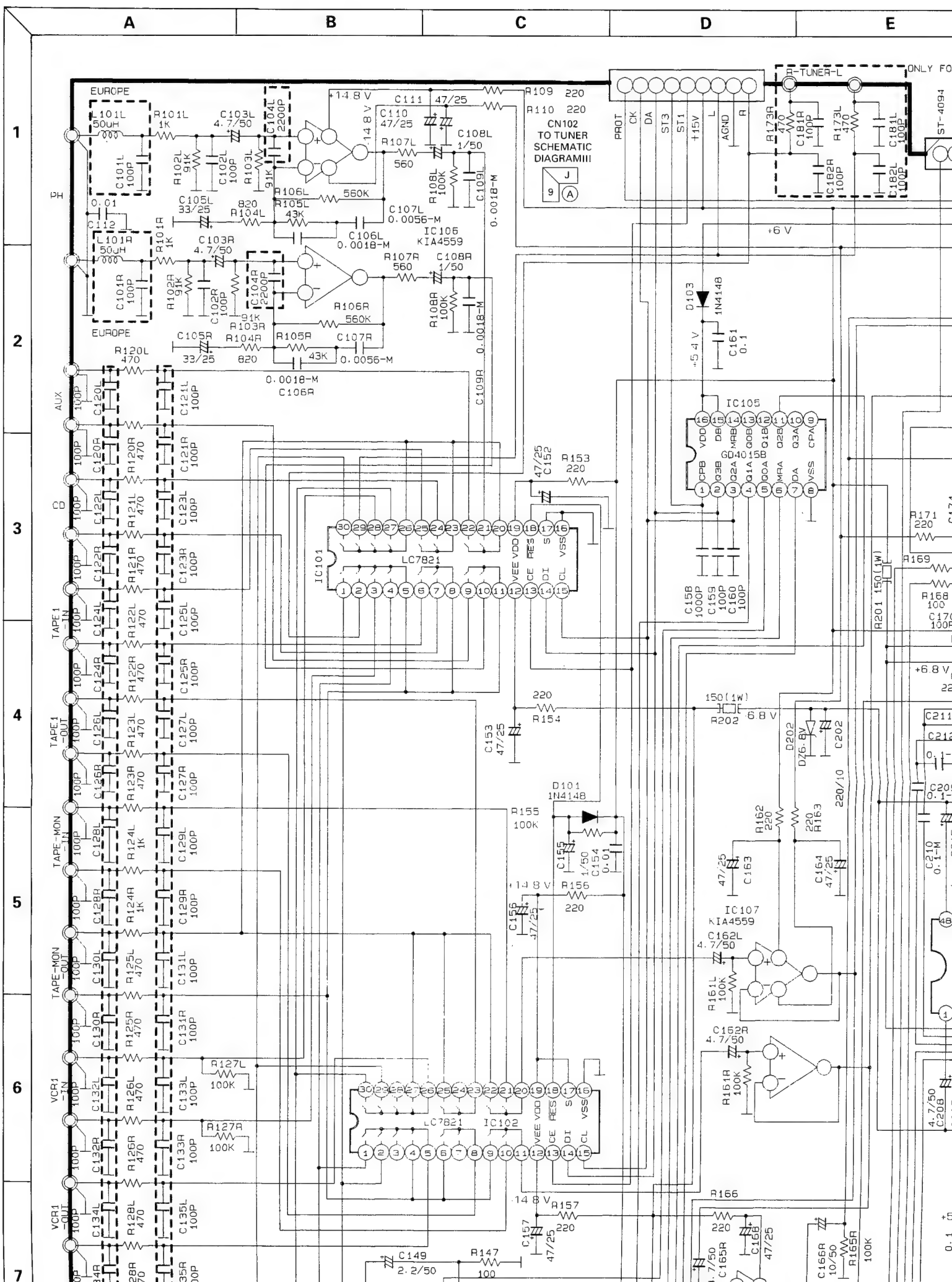


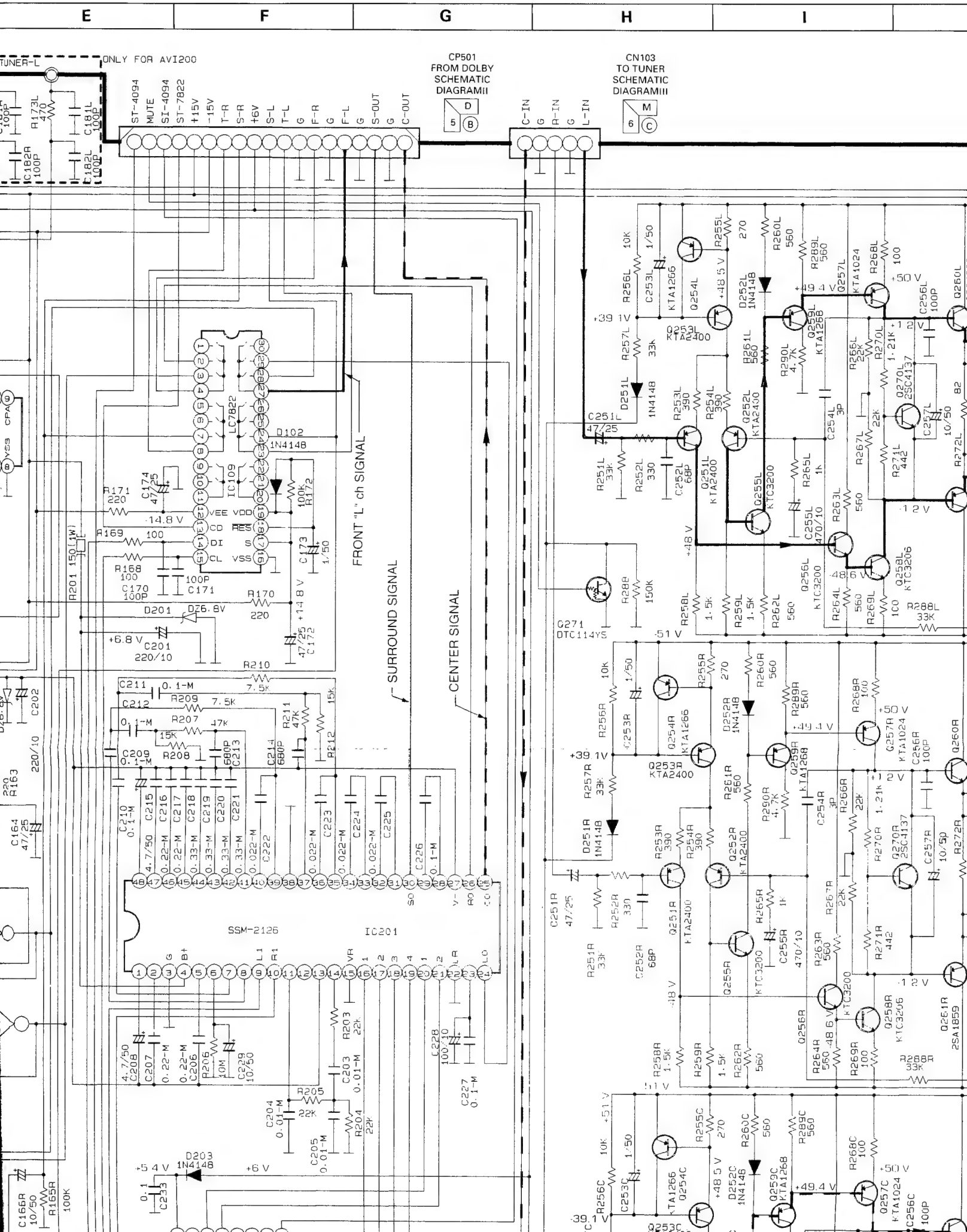
IC109, IC506 LC7822

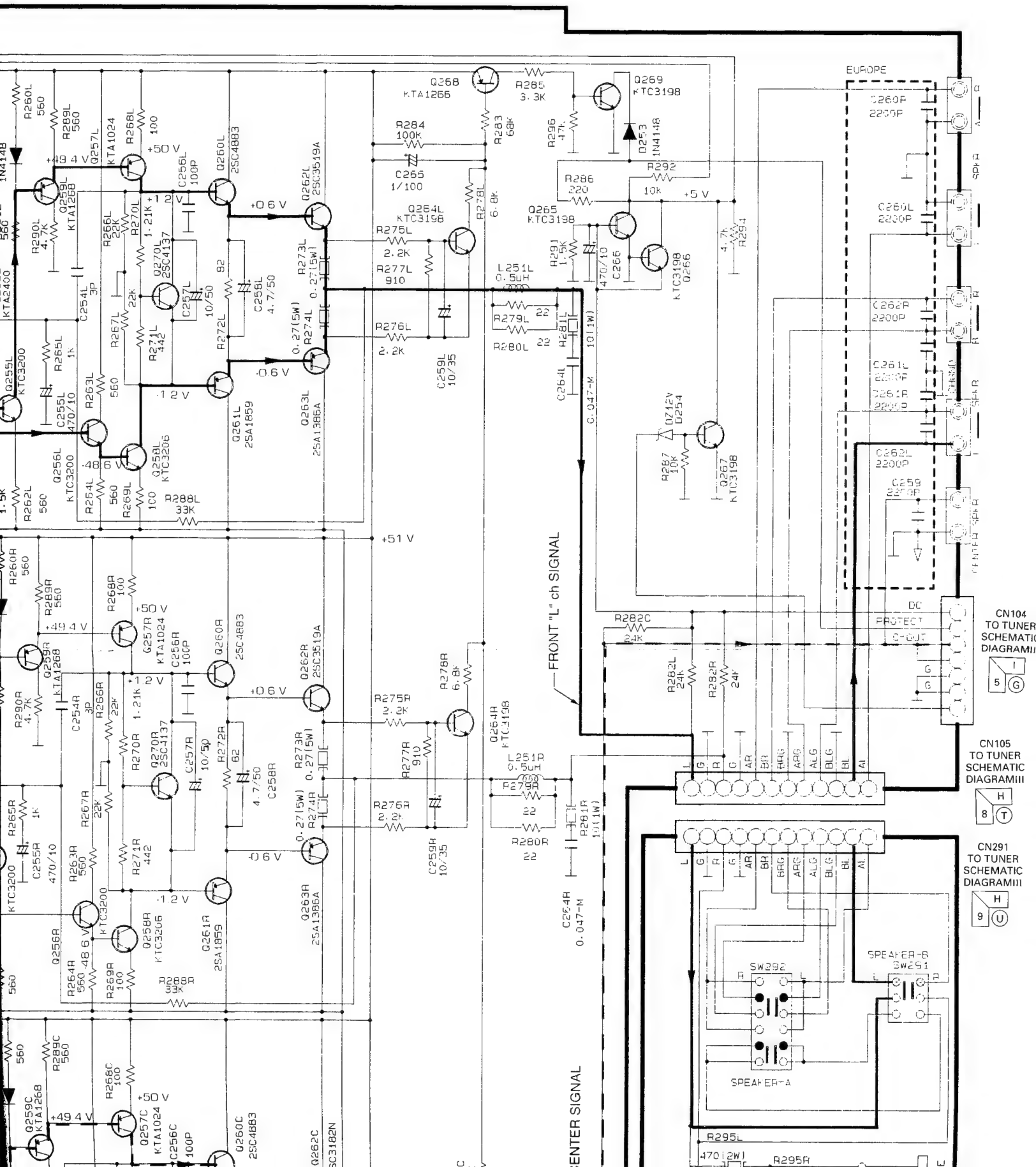


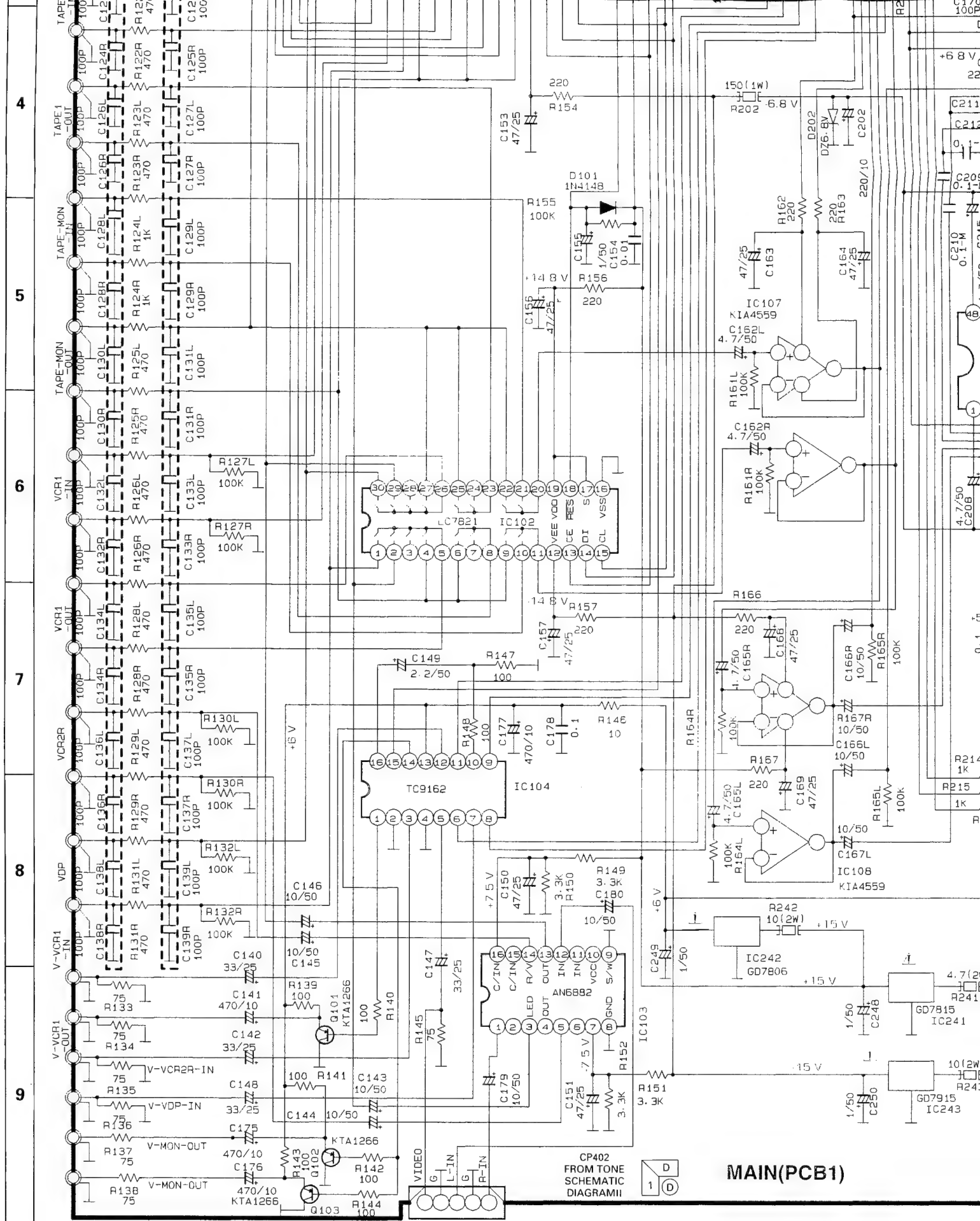
IC201 SSM2126A





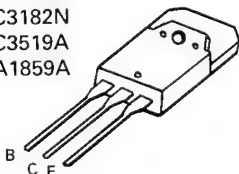




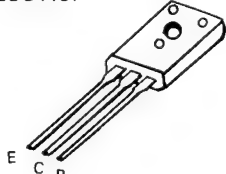


PIN CONNECTION DIAGRAM OF TRANSISTORS AND DIODES

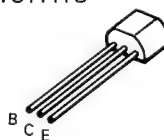
2SA1265N
2SC3182N
2SC3519A
2SA1859A



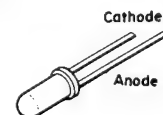
2SC4137



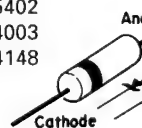
DTA114YS
DTC114YS

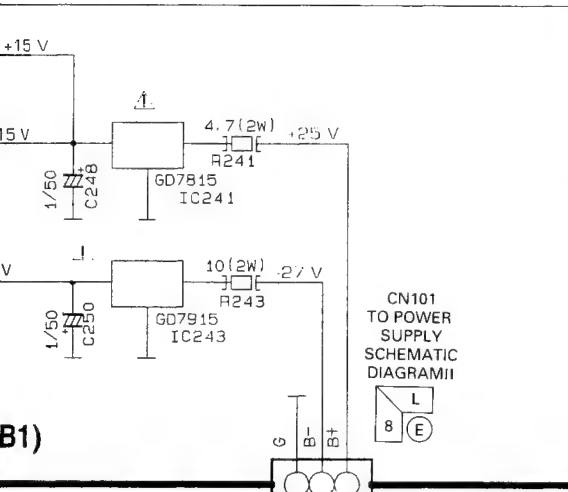
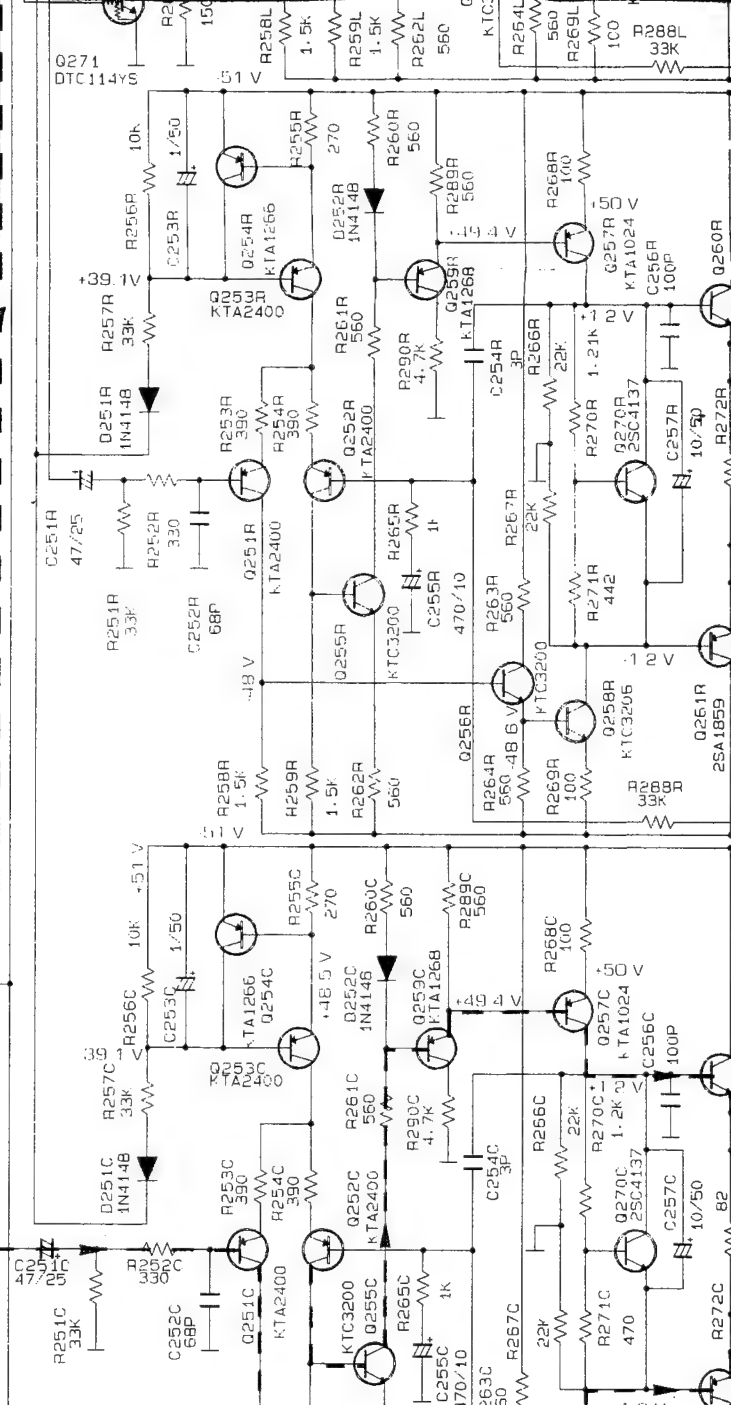
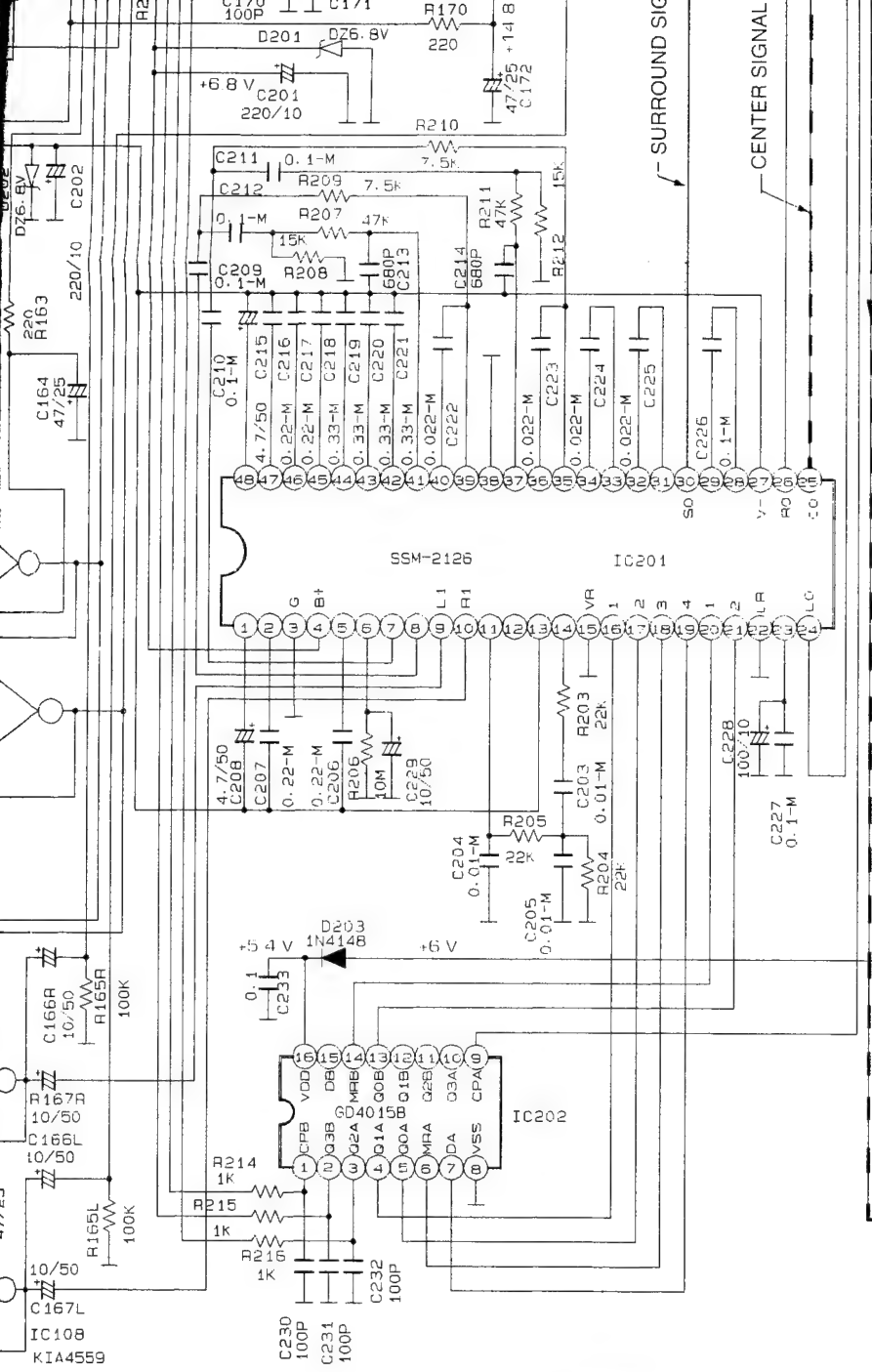


SPR-54MDW3
SLR-22VRS



ZENER
PX6A03
IN5402
IN4003
IN4148






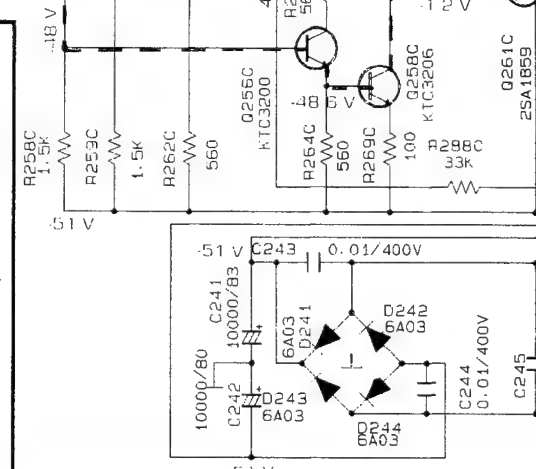
NOTES

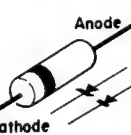
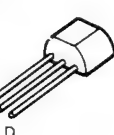
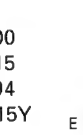
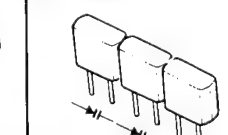
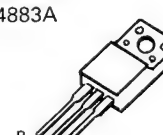

1. Resistor values are indicated in ohms unless otherwise specified
(K=1,000 M=1,000,000)
2. Capacitor values are indicated in microfarads unless otherwise specified.
(p=micro-microfarads)

CAUTION

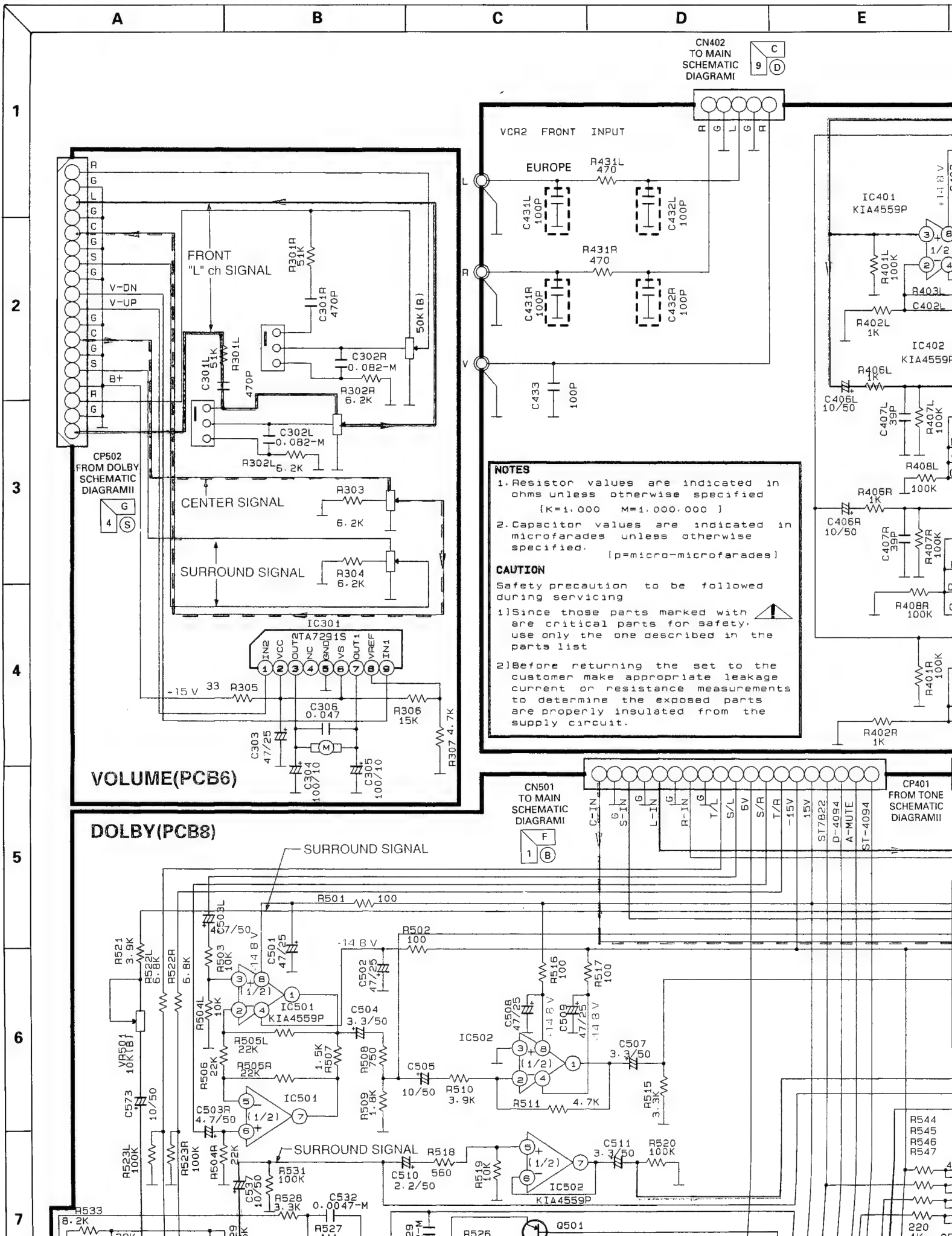
Safety precaution to be followed during servicing

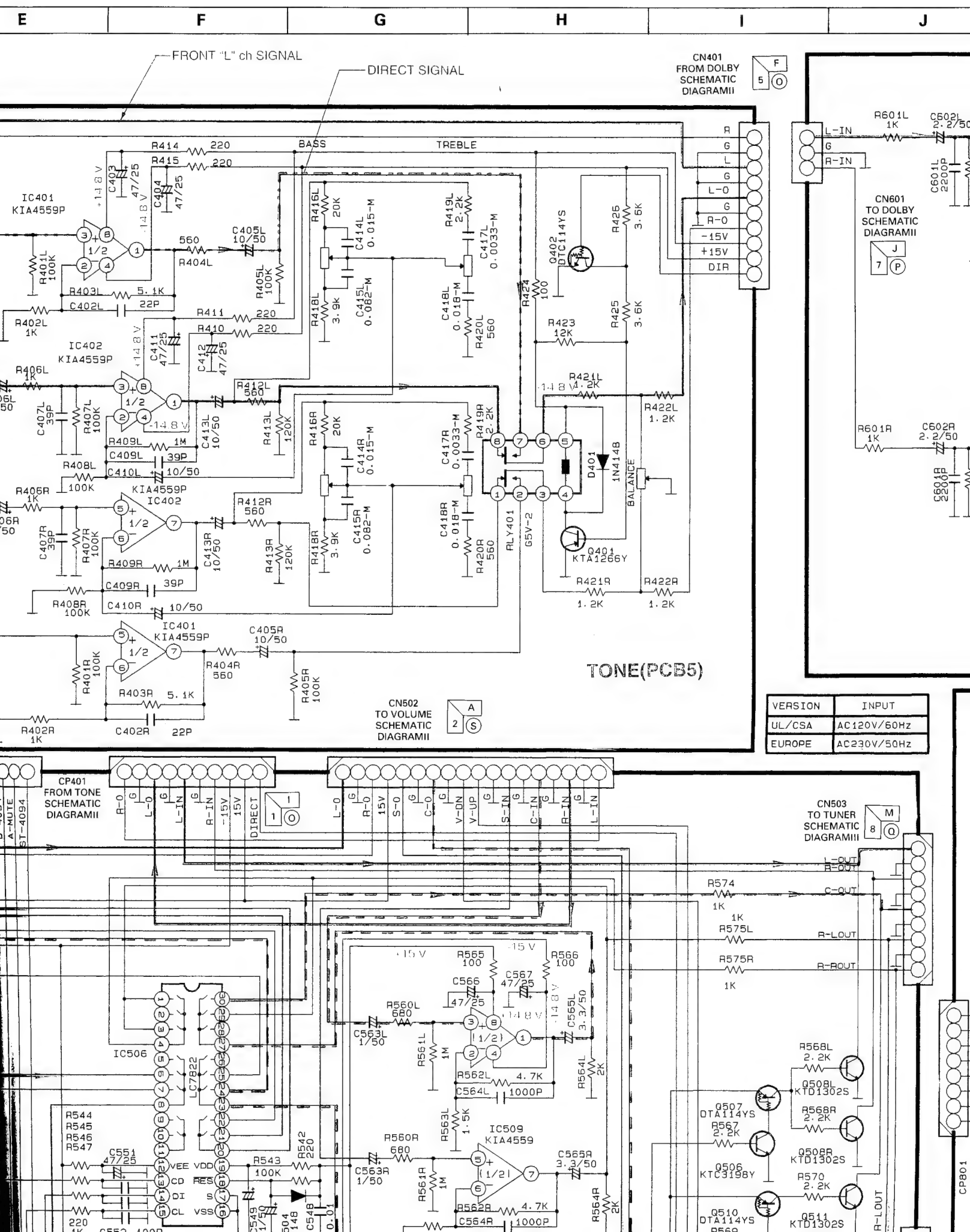
- 1) Since those parts marked with  are critical parts for safety, use only the one described in the parts list
- 2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.



<p>ZENER PX6A03 IN5402 IN4003 IN4148</p> 	<p>2SK168</p> 	<p>KTA2400 KTD1302 KTC2240/KTC3200 KTC3198/KTC1815 KTC1923/KTC3194 KTA1266/KTA1015Y</p> 	<p>KV1236Z</p> 	<p>2SA1386A 2SC4883A</p> 	<p>KTC2229/KTC KTA949/KTA</p> 
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SCHEMATIC DIAGRAMS II





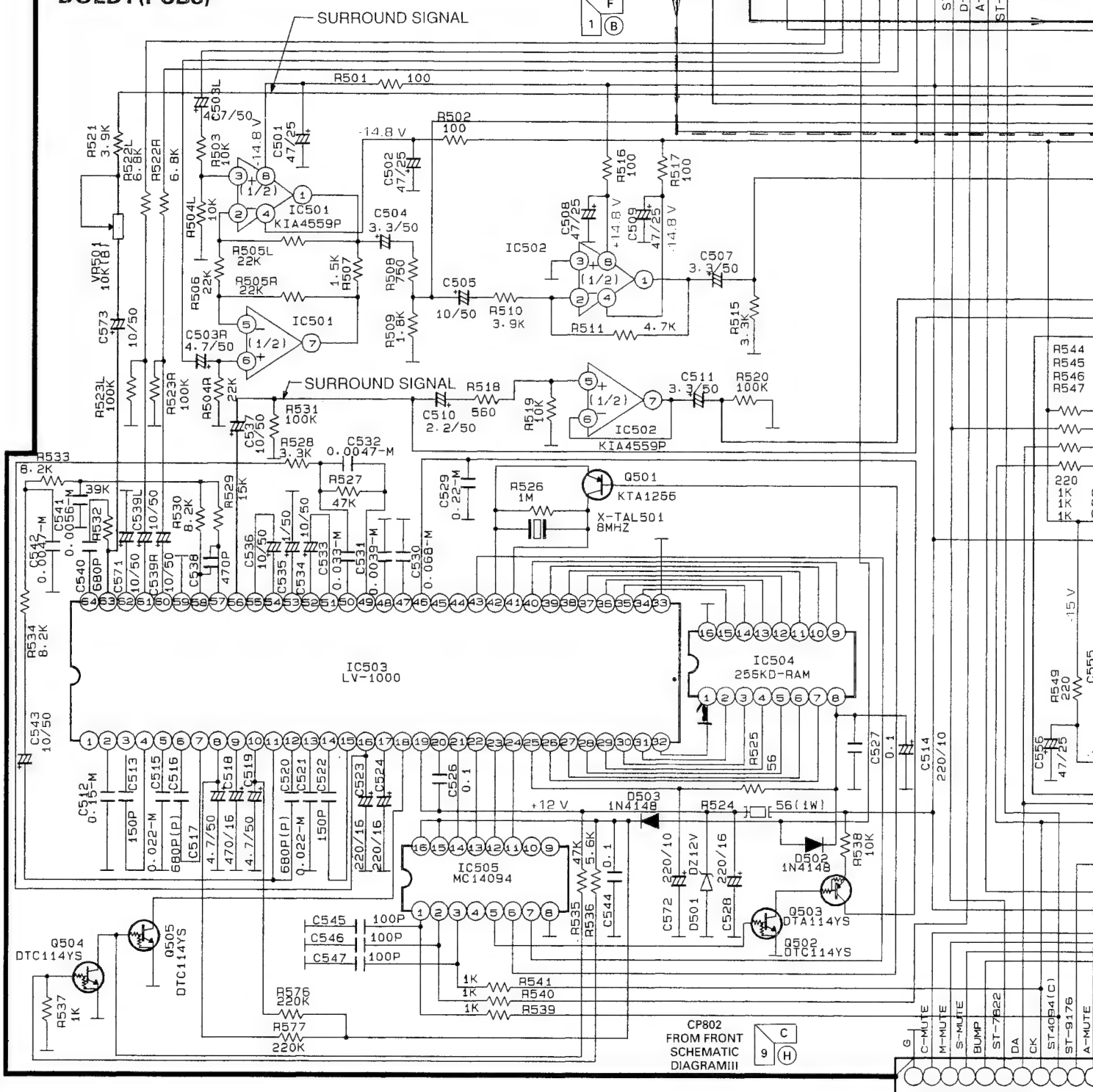


VOLUME(PCB6)

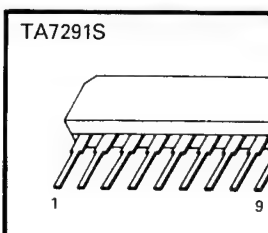
DOLBY(PCB8)

1) Since those parts marked with are critical parts for safety, use only the one described in the parts list

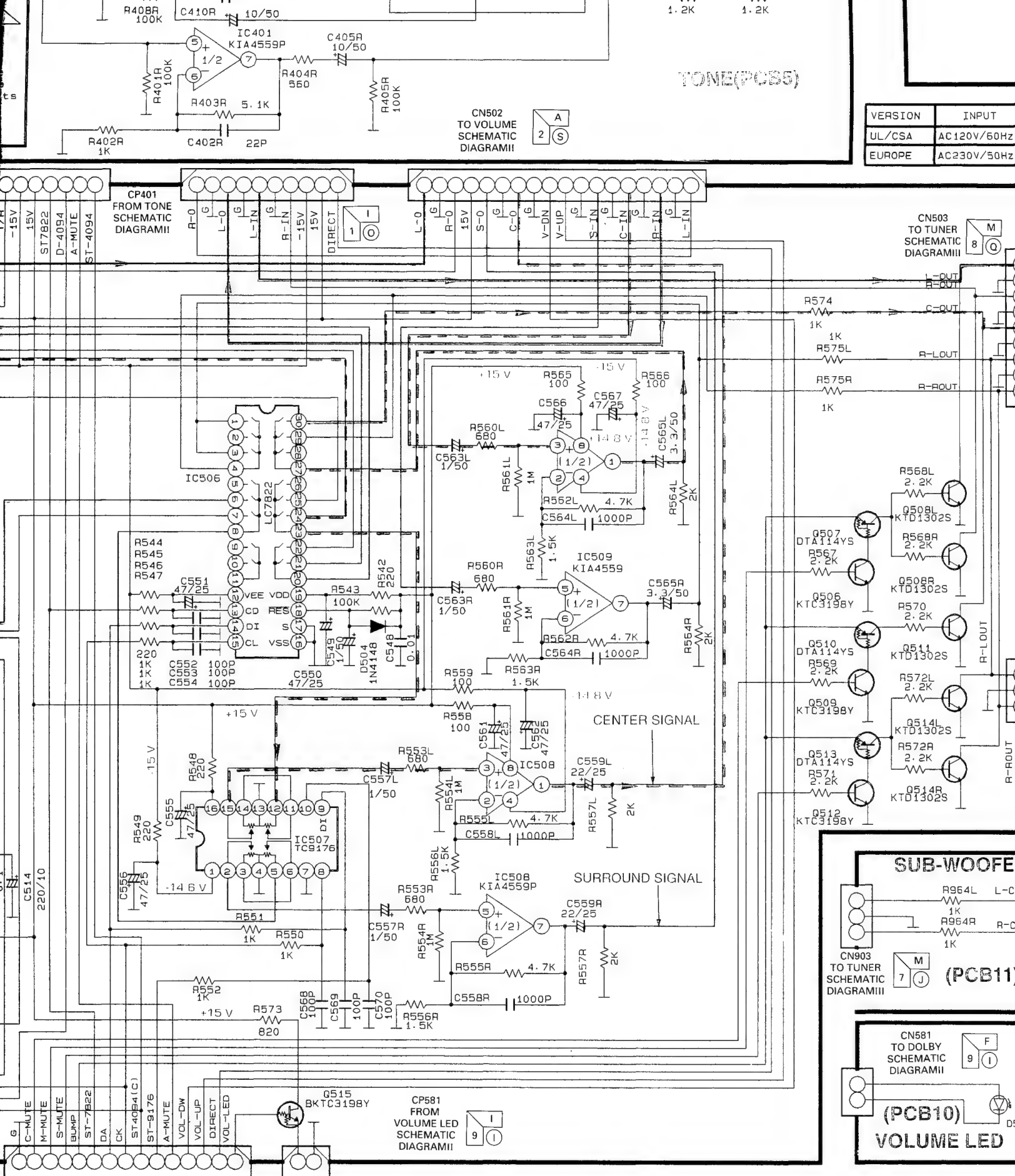
2) Before returning the set to the customer make appropriate leakage current or resistance measurements to determine the exposed parts are properly insulated from the supply circuit.



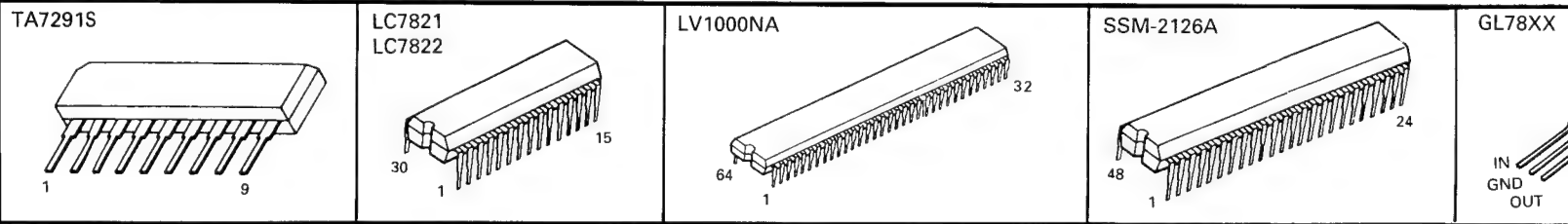
PIN CONNECTION DIAG



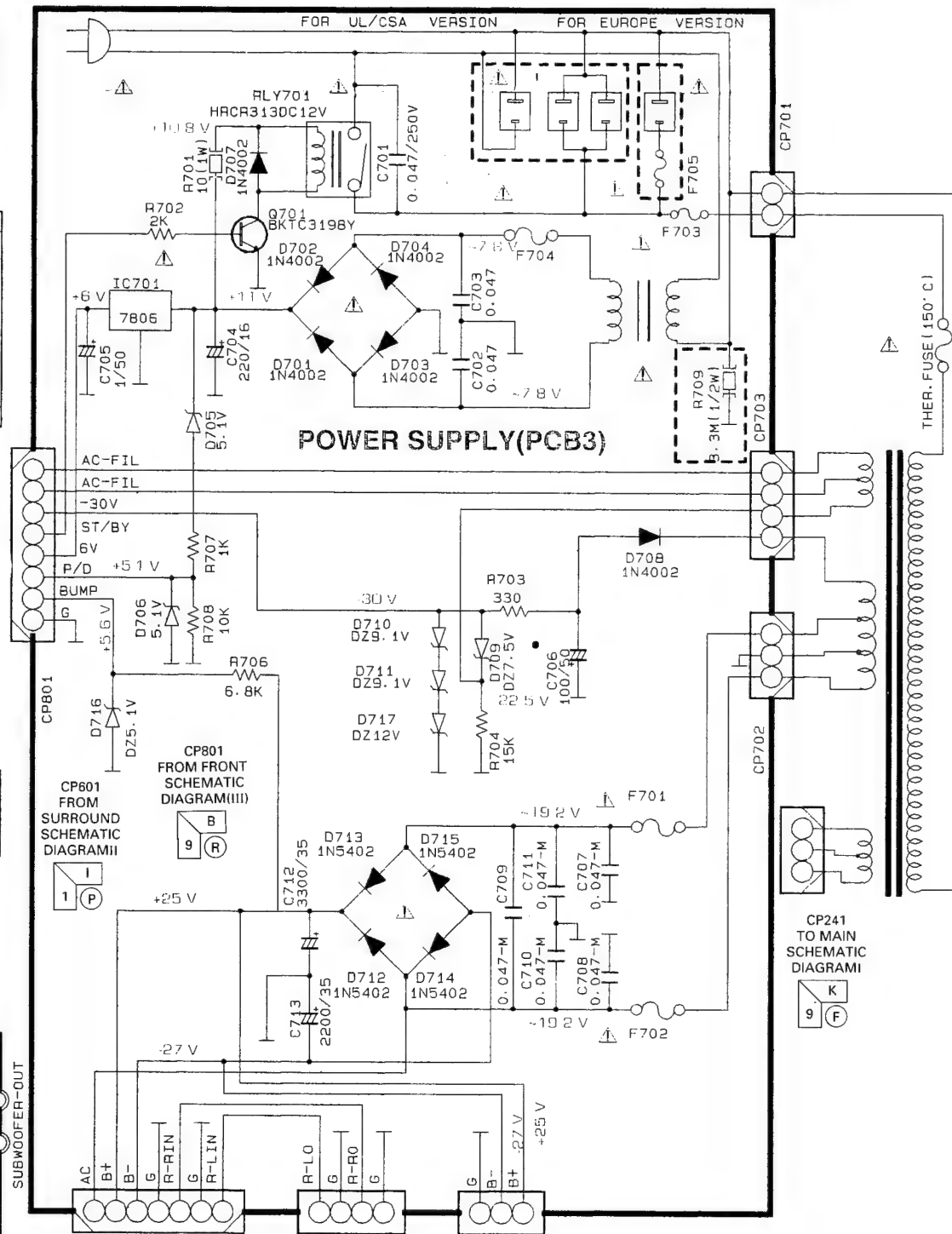
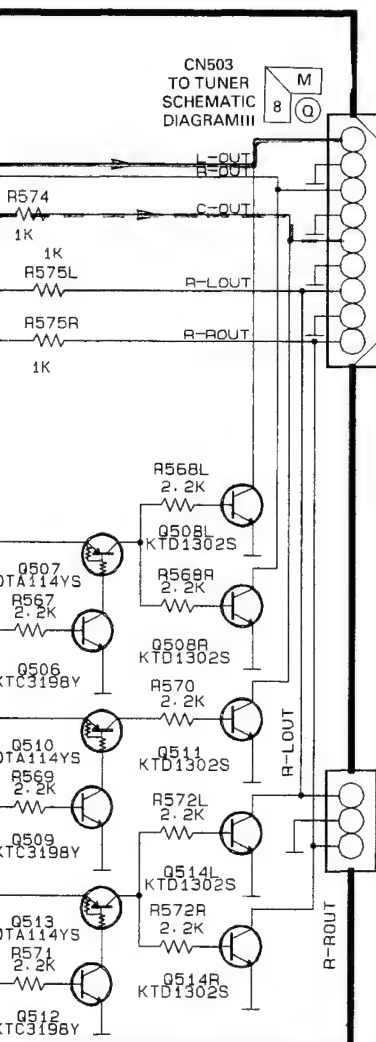
FRONT "L"ch SIGNAL
SURROUND SIGNAL
CENTER SIGNAL



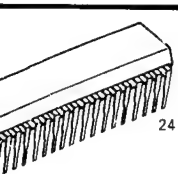
PIN CONNECTION DIAGRAM OF ICs.



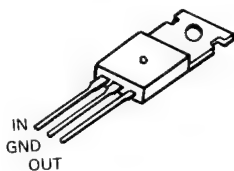
VERSION	INPUT
UL/CSA	AC120V/60Hz
EUROPE	AC230V/50Hz



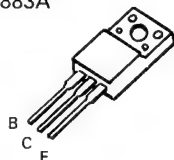
NO	VERSION	USA/CANADA	EUROPE
F701-F702		SB4A/125V	T4A/250V
F703		SB6A/125V	T4A/250V
F704		NB315mA/125V	T500mA/250V
F705		-	T2.5A/250V
R708		3.3M(1/2W)	-



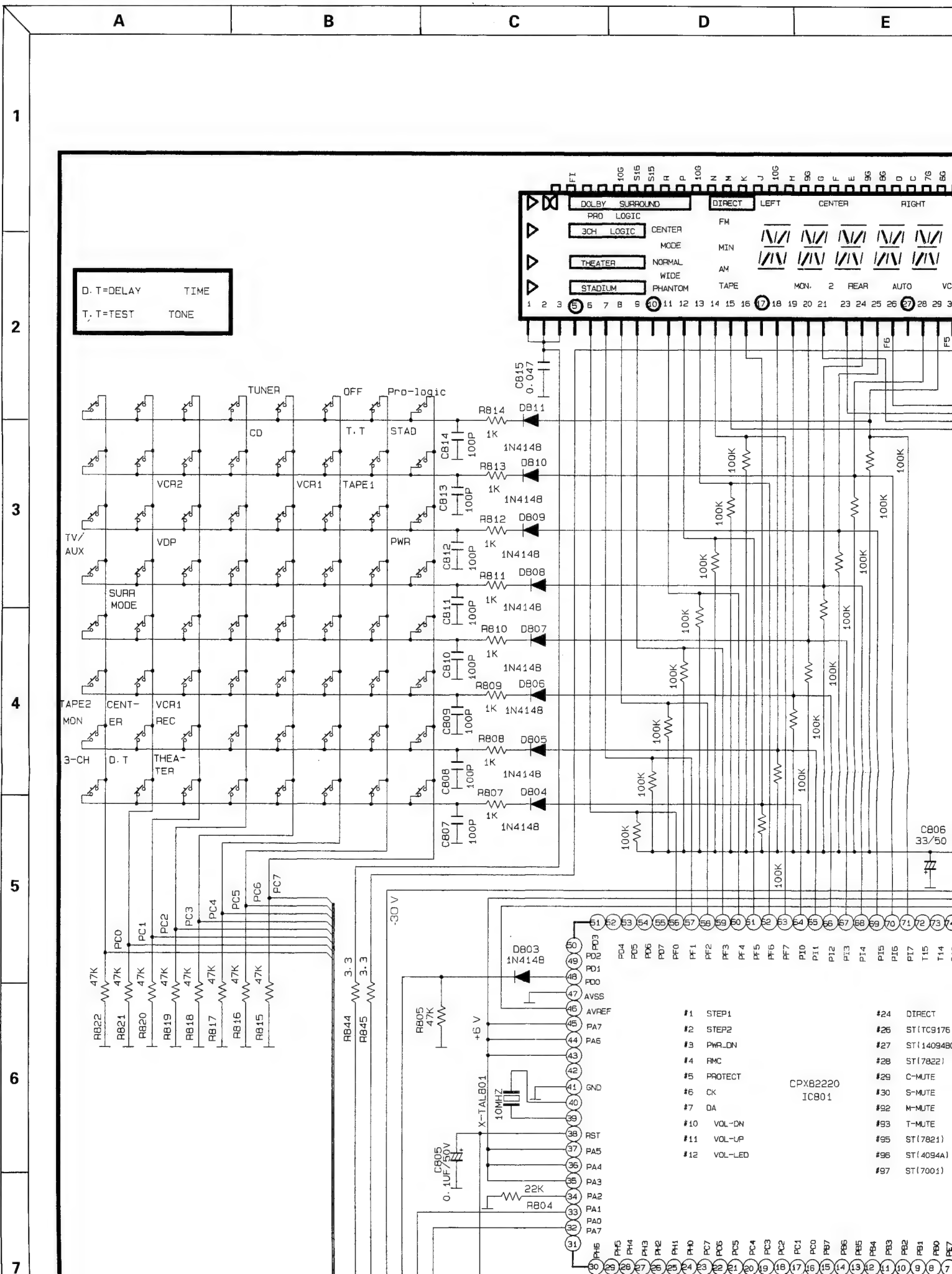
GL78XX

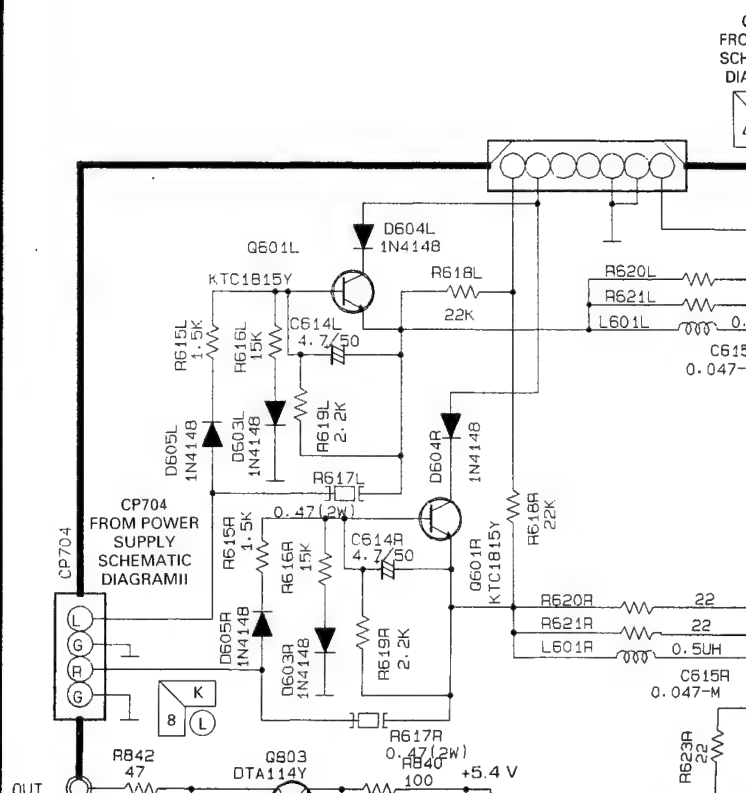


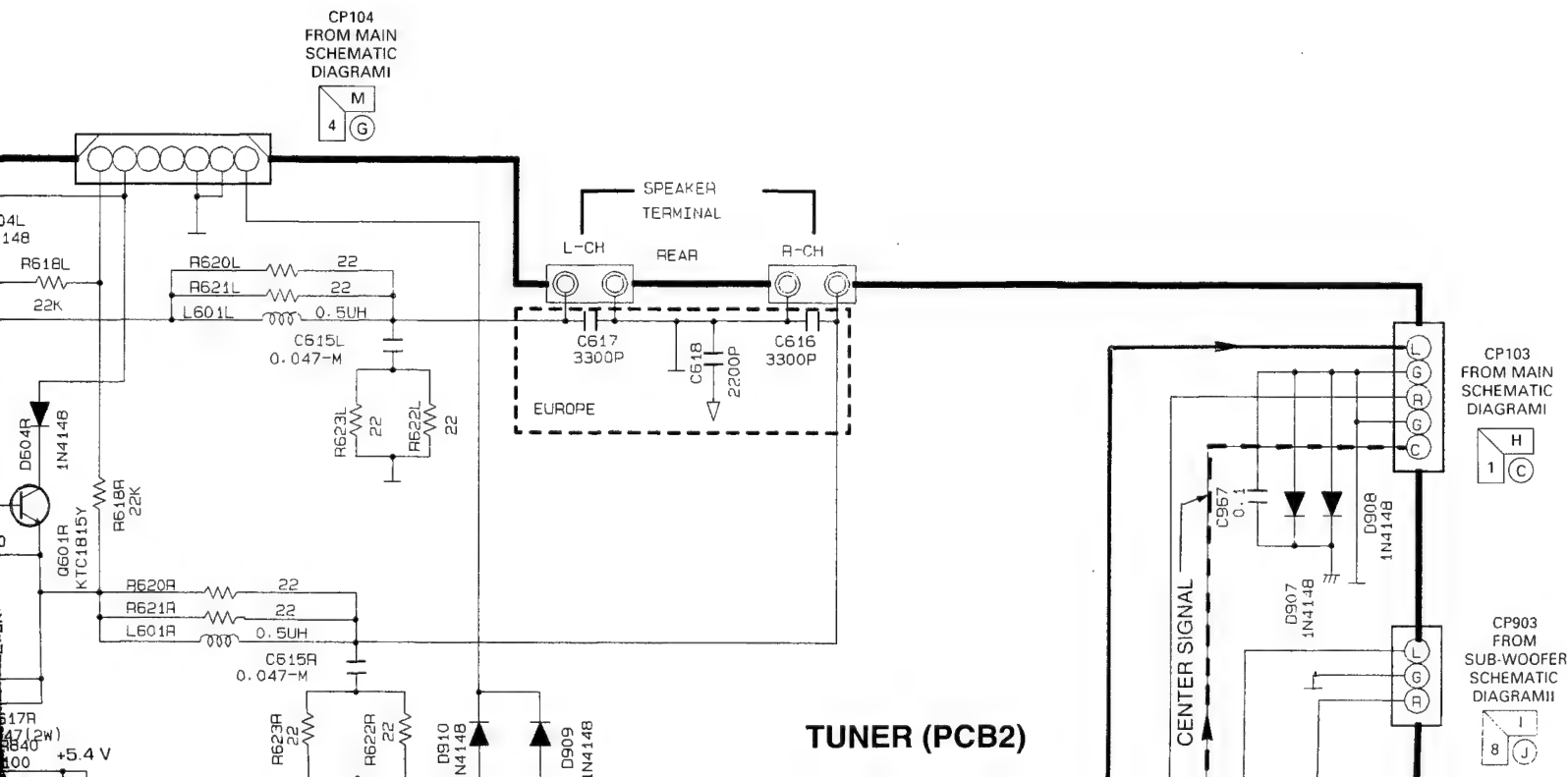
2SA1386A
2SC4883A

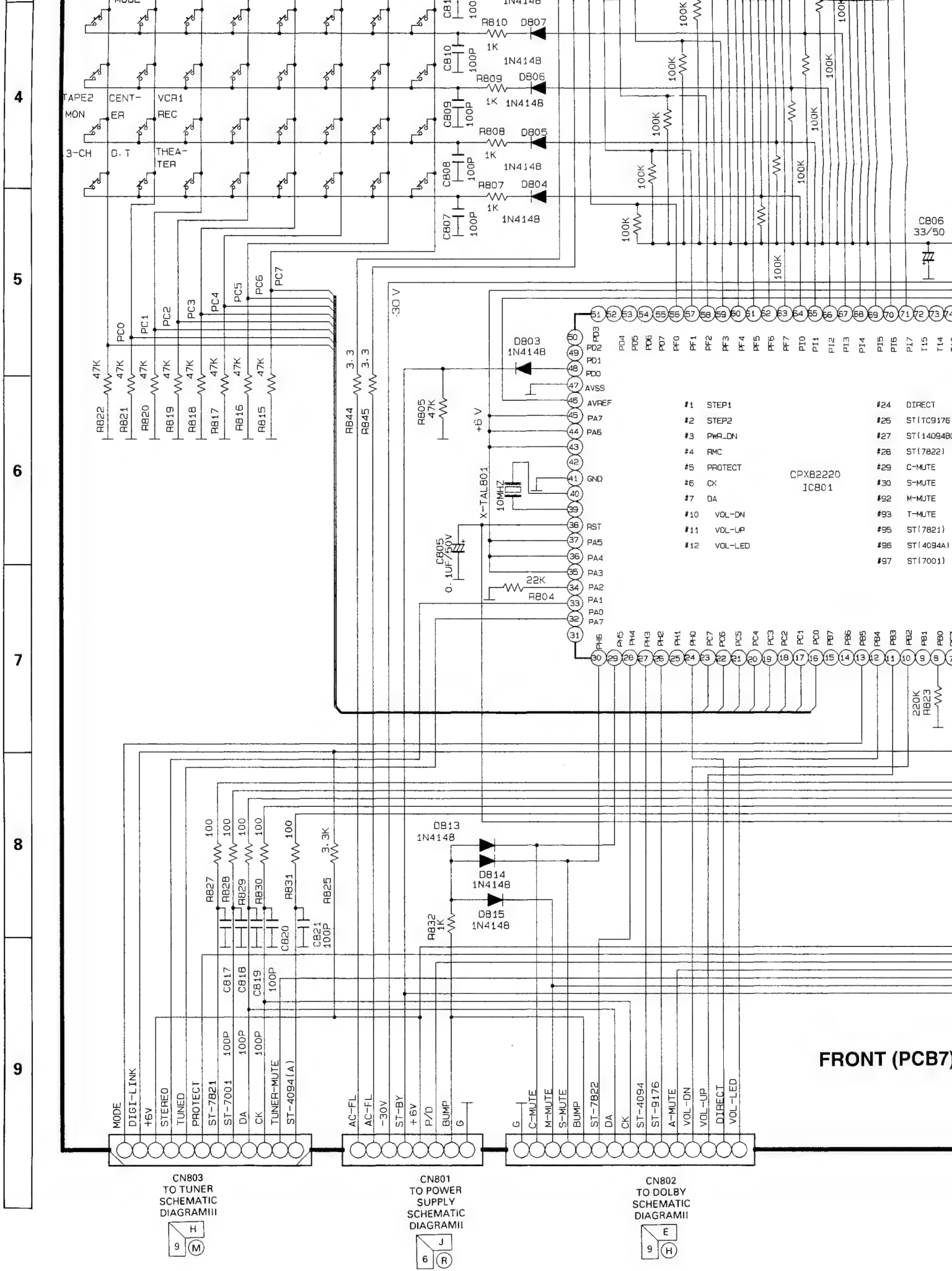


SCHEMATIC DIAGRAMS III

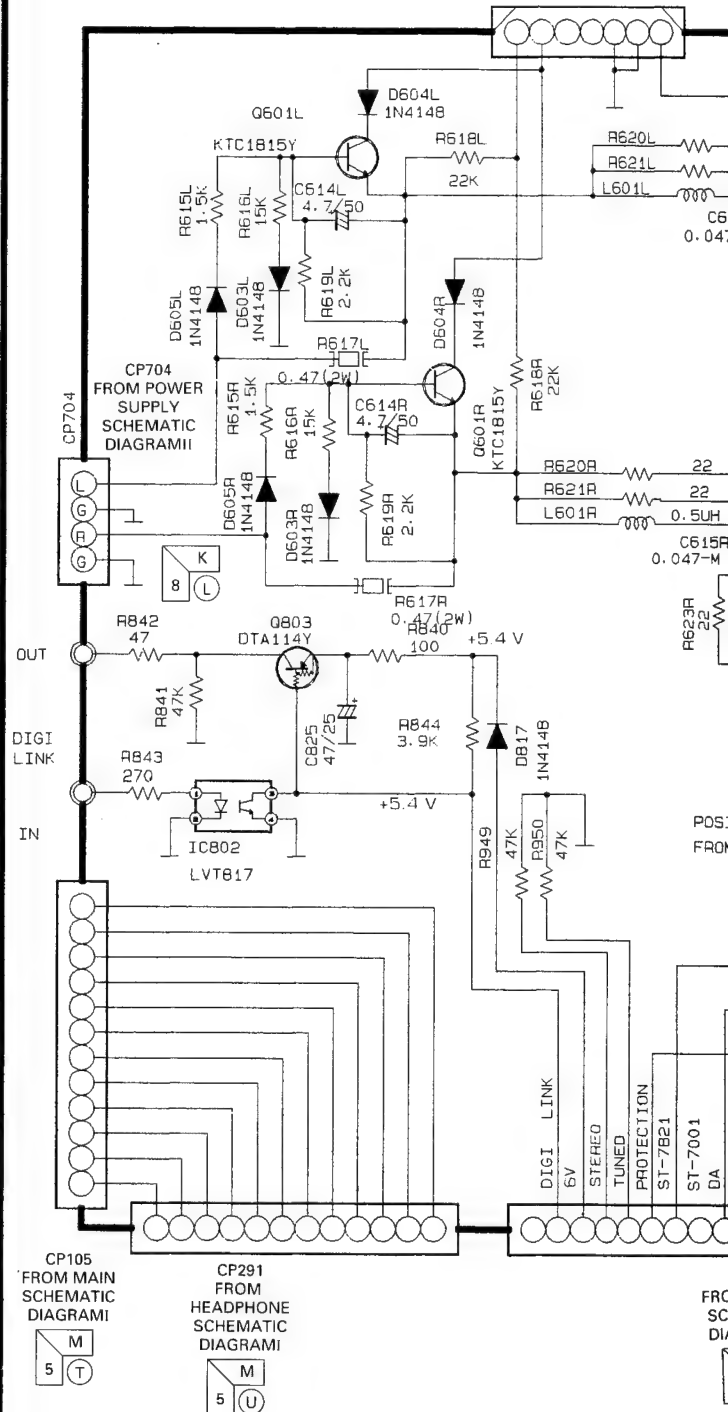
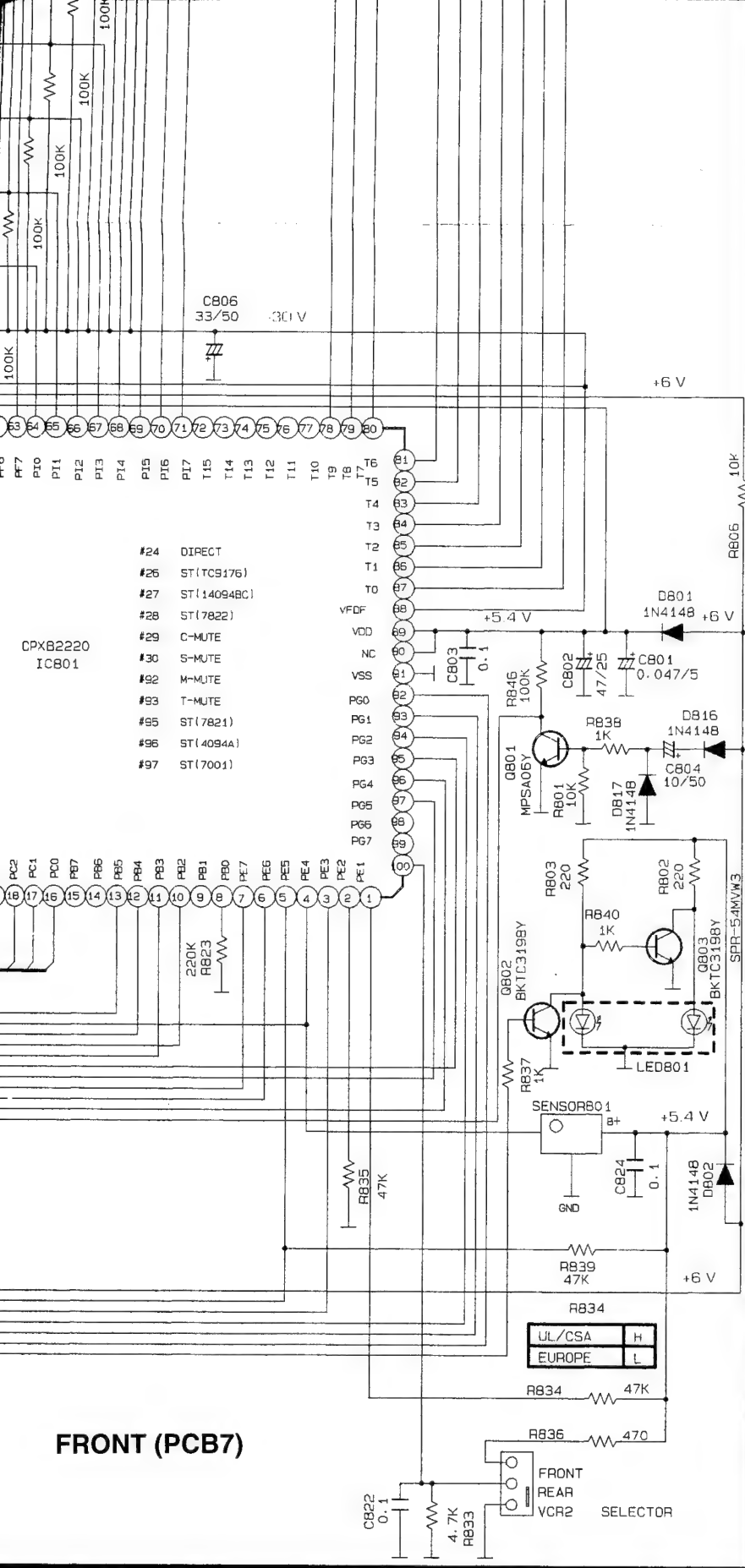






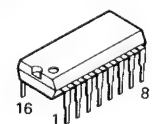


FRONT (PCB7)

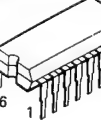


PIN CONNECTION DIAGRAM OF ICs

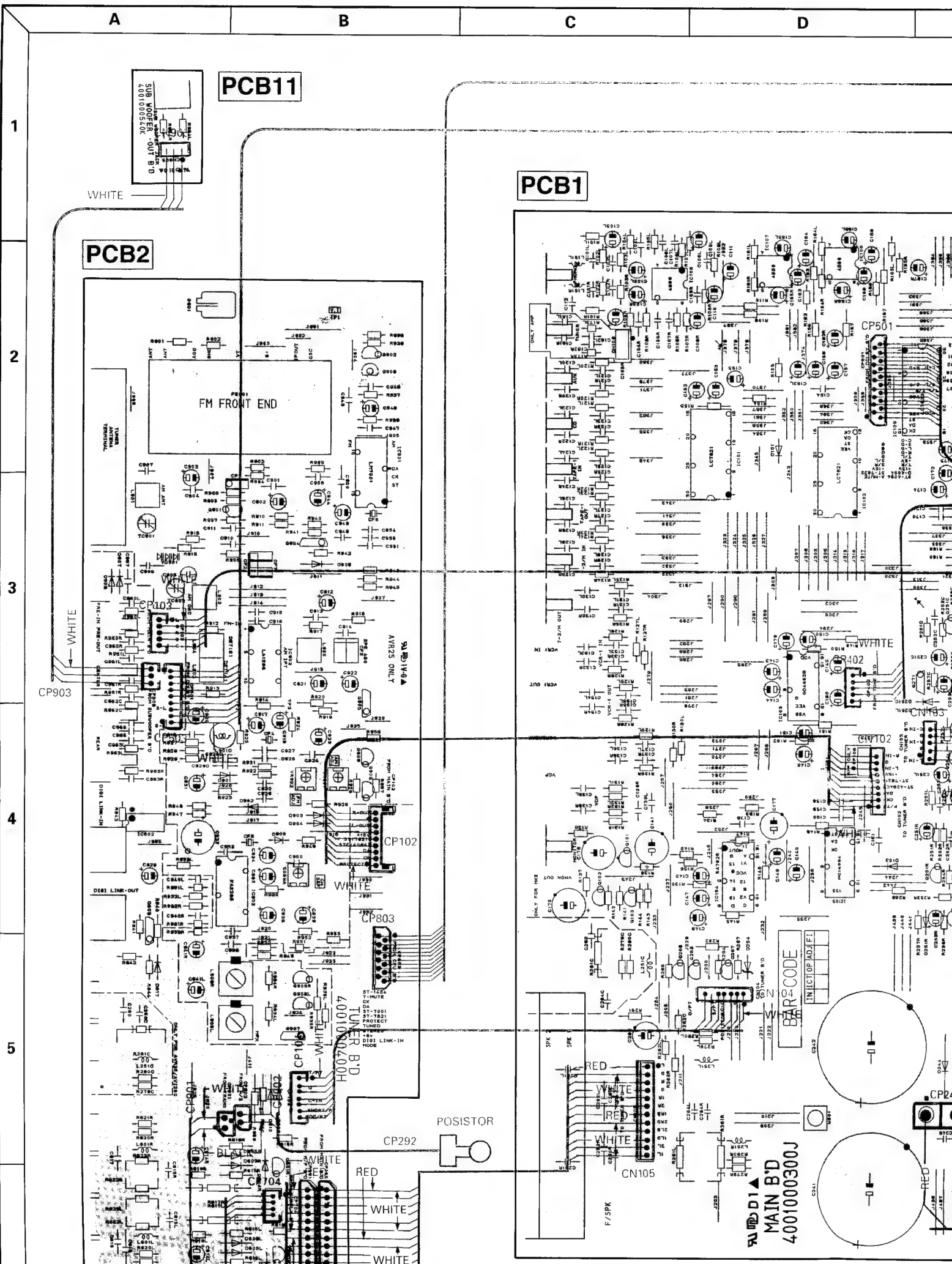
MC14094
TC9176P



GD4052
BA7625



WIRING DIAGRAM



H



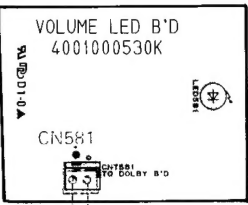
H

I

J

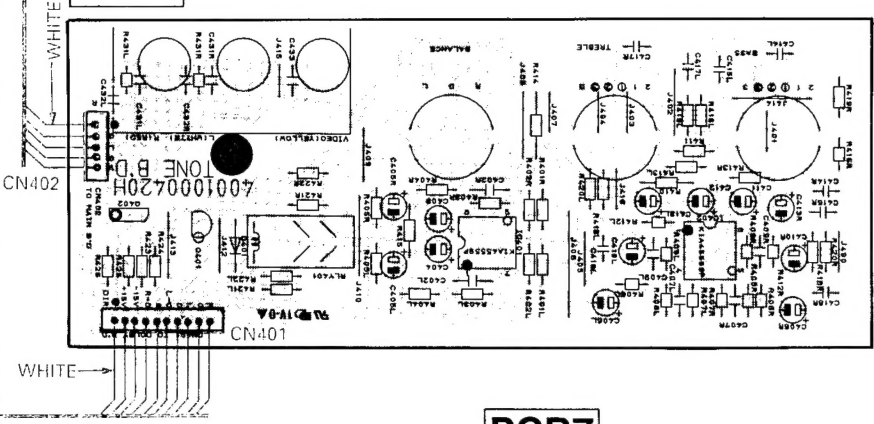
K

PCB10

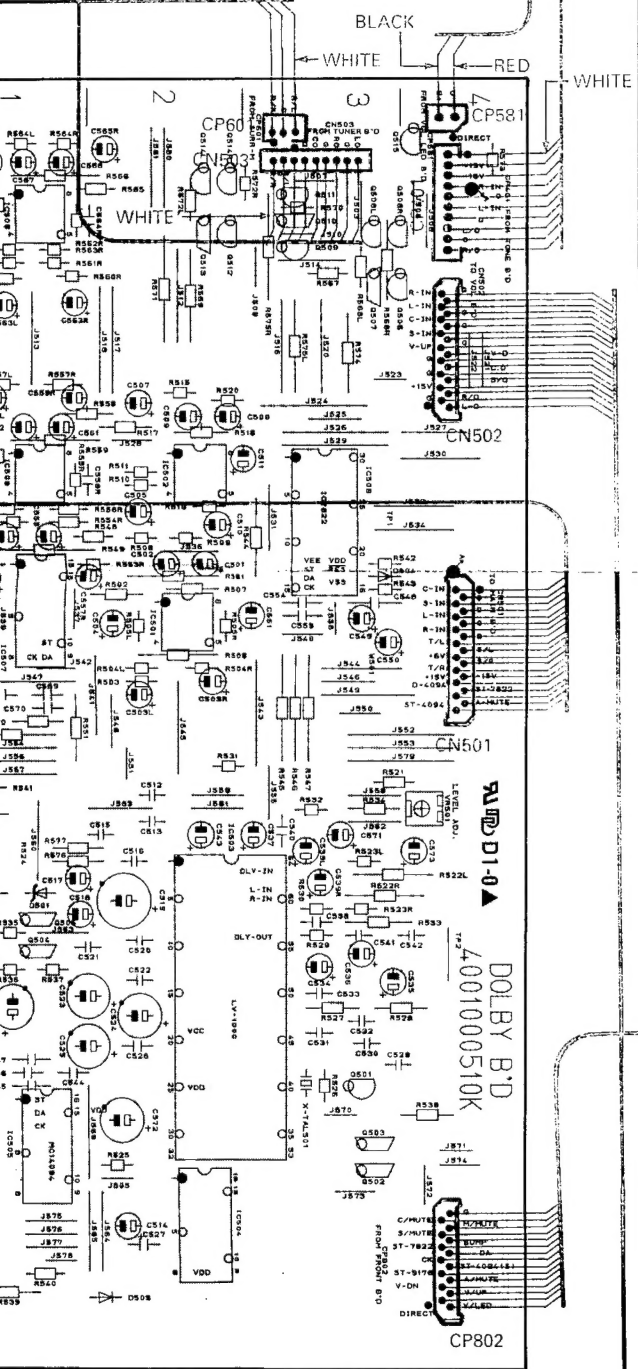
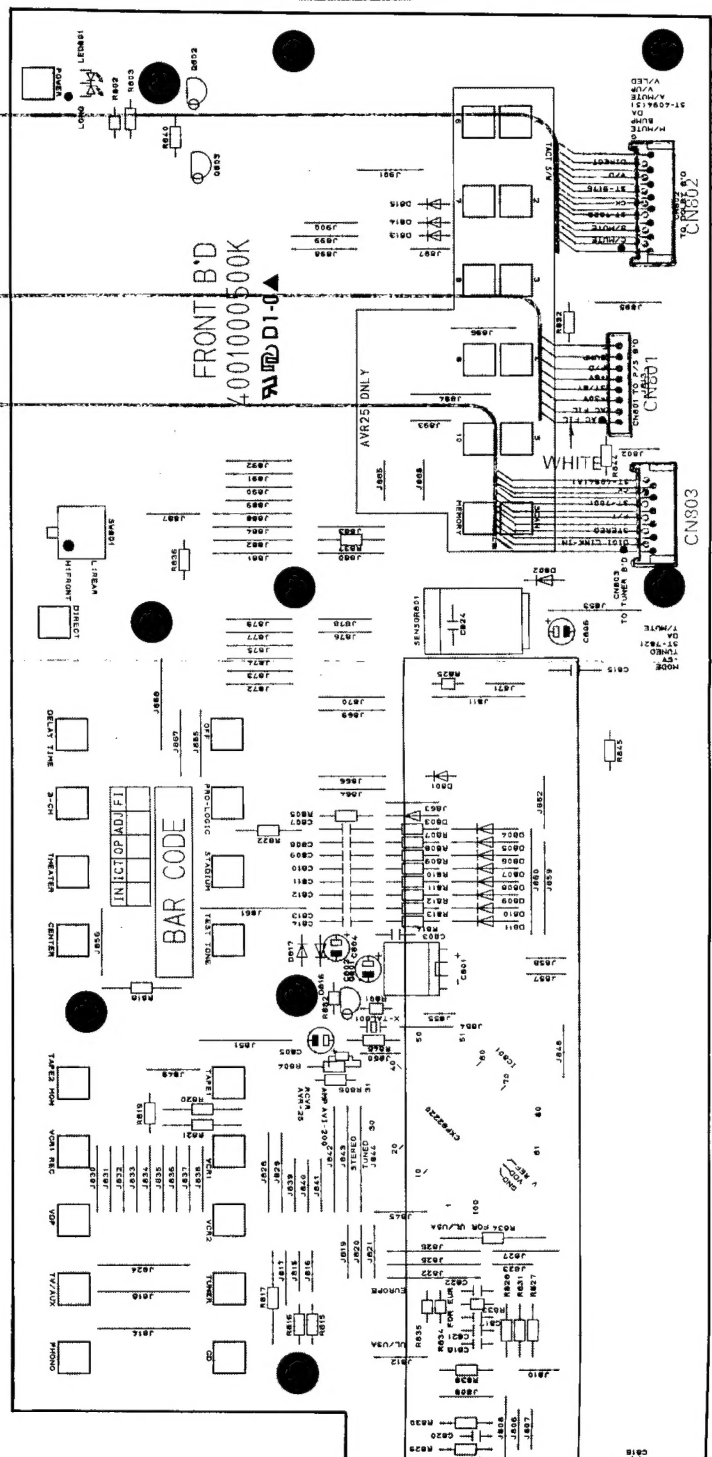


CARD CABLE, 12P

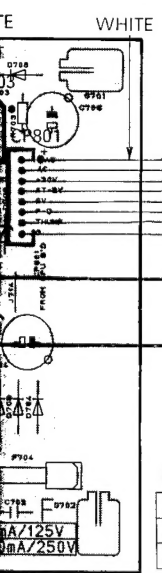
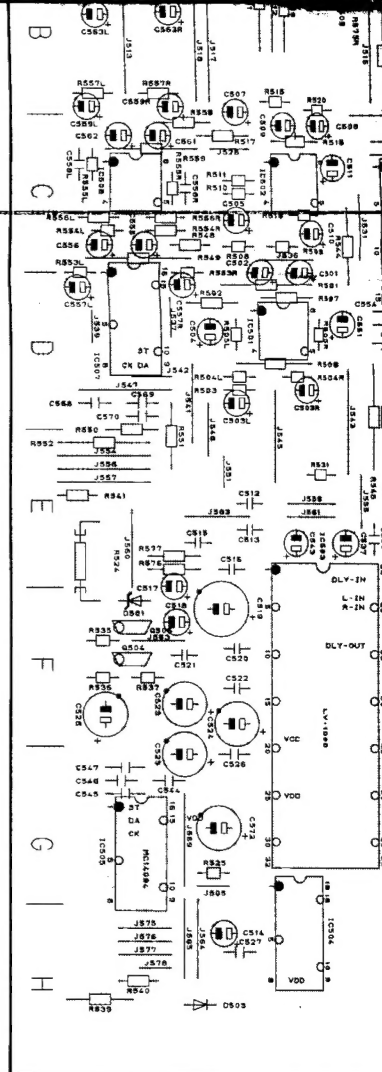
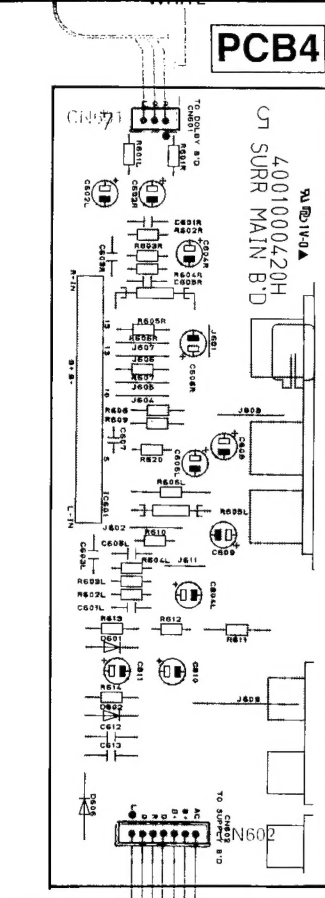
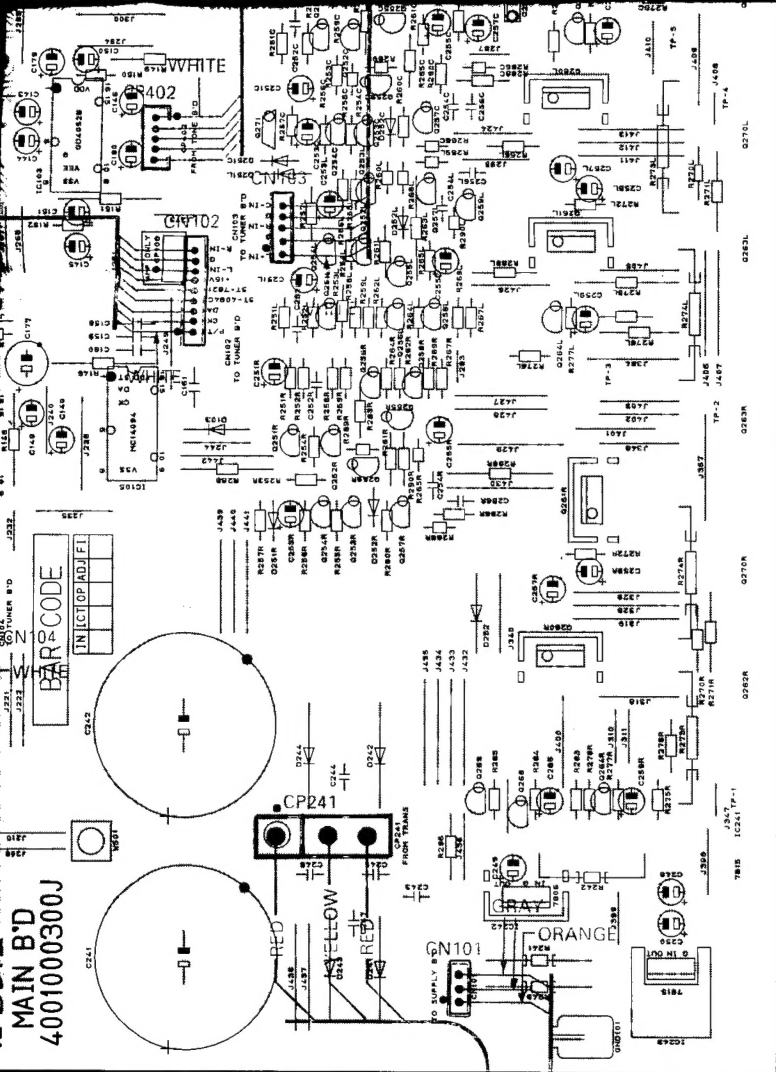
PCB5



PCB7



CARD CABLE, 15P



120 V	230 V
BLACK	ORANG
BLUE	YELLOW

